



Draft Environmental Assessment

REPLACEMENT OF THE ST. GEORGE ISLAND STATE PARK RESTROOMS AND BATH HOUSES

FEMA Orlando Long Term Recovery Office

FEMA-1595-DR-FL

June 2006



FEMA

DRAFT ENVIRONMENTAL ASSESSMENT

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Section 1 -Introduction

1.1 Project Authority

Hurricane Dennis was an unusually strong July major hurricane that left a trail of destruction from the Caribbean Sea to the northern coast of the Gulf of Mexico. Dennis formed from a tropical wave that moved westward from the coast of Africa and followed a west-northwest course across the Caribbean Sea. Dennis reached hurricane strength early on July 7, 2005, and then rapidly intensified into a Category 4 hurricane before making landfall in southeastern Cuba. Hurricane Dennis continued northwest across the Gulf of Mexico before it made landfall on Santa Rosa Island, Florida. Hurricane Dennis landed between Navarre Beach and Gulf Breeze on July 10, 2005 with sustained winds of 120 mph. Dennis produced a storm surge of six to seven feet above normal tide levels on Santa Rosa Island, near where the center made landfall. The storm surge washed over Santa Rosa Island near and to the west of Navarre Beach. Dennis continued north-northwestward after landfall, with the center moving across the western Florida Panhandle into southwestern Alabama before it weakened into a tropical storm.

As a result of the landfall of Hurricane Dennis and its impacts on the State of Florida, Governor Jeb Bush requested a disaster declaration for the State of Florida.

President George W. Bush issued a major disaster declaration (FEMA - 1595 – DR - FL) on the same day as requested, in conformance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by *Public Law 106-390*, the Disaster Mitigation Act of 2000. Subsequently, the Florida Department of Environmental Protection has petitioned the Federal Emergency Management Agency (FEMA) for 406 Public Assistance funding under the provisions of the same act. In accordance with the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (*40 Code of Federal Regulations [CFR] Parts 1500 through 1508*), and FEMA regulations for NEPA compliance (*44 CFR Part 10*), FEMA requires an evaluation of alternatives, and a discussion of the potential environmental impacts of a proposed federal action, as part of the Environmental Assessment (EA) process for federal funding. The purpose of this EA is to meet FEMA's responsibilities under the NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement (EIS) for the proposed project.

1.2 Project Location

The Florida Department of Environmental Protection (FDEP), State Park Service, has applied for a federal grant to fund the demolition and replacement of the Hurricane Dennis storm damaged public restrooms and bath house facilities at the Dr. Julian G. Bruce St. George Island State Park (St. George Island State Park). St. George Island State Park is situated on the Gulf Barrier Chain and is a narrow island created by wind and storm deposited sands; it is located along the southern edge of the Apalachicola Coastal Lowlands of the Gulf Barrier Chain within Franklin County, FL. The eastern eight to nine miles of the island comprise the St. George Island State Park.

Refer to the series of Location maps in Appendix A - Exhibits 1 and 2. The island is located south of Apalachicola and East Point, and surrounded by Apalachicola Bay to the north and the Gulf of Mexico to the south. Access to St. George Island is via County Highway 300, carried on a bridge from the Village of East Point, east of the City of Apalachicola, to the island.

1.3 Purpose and Need

The objective of FEMA's Public Assistance Program is to reduce the impacts of natural disasters on the built environment; assist the community in recovering from damages caused by disasters; reduce future losses resulting from natural disasters; and protect the health, safety and welfare of citizens. The purpose of the action presented in this EA is the replacement of the FDEP's St. George Island State Park public beach restrooms and bath house / shower facilities that were destroyed by Hurricane Dennis. The need is to provide public restrooms, showers and bathing facilities that meet the safety and health needs consistent with the demand for public outdoor recreation along the beaches for the local area residents and visitors to St. George Island State Park.

1.4 Existing Facility

The park is very linear, accessed by approximately five miles of a paved two-lane roadway paralleling the Gulf of Mexico, and provides park visitors opportunities for camping, picnicking, swimming and beach activities. The primary recreational resources of the park are its shorelines on the Gulf of Mexico and Apalachicola Bay. Over 200,000 visitors used the beach area, camping area and trails in the park in fiscal year 1999-2000. The management of this volume of public use on the shoreline areas of the park is the greatest challenge in the FDEP Division of Recreation and Park's management of the area.

Two large day-use areas for beach visitors are located within the park, the day-use areas are approximately one mile apart along the shoreline. A privately-owned and operated potable water system provides water service to the park; however, no such sewage disposal systems are available. All of the park's sewage needs were satisfied by onsite sewage treatment and disposal systems (septic tanks and drain-fields).

The two day-use areas on St. George Island State Park are the East Slough Beach Use Area and the Sugar Hill Beach Area. The East Slough Beach Use Area consists of three large picnic shelters, two restroom and bathhouse / shower facilities (damaged / destroyed beyond repair by Hurricane Dennis storm surges), two connected paved parking lots totaling 220 parking spaces, and a system of connecting boardwalks totaling approximately 850 linear feet. The Sugar Hill Beach Use Area consists of precisely the same facilities and layouts as at the other area, although the damage from the Hurricane Dennis storm surge was less intense. The repairs added up to less than 50% of the replacement costs, but FDEP has elected to demolish and replace them. The facilities as they existed are illustrated in Appendix A – Exhibit 2. These areas will be referred to as “East Beach Use Area” (Sugar Hill) and “West Beach Use Area” (East Slough) throughout the remainder of this EA document.

Photographs of the existing facilities, including damages caused by Hurricane Dennis, can be seen in Appendix A, Photographs, Collections 1 and 2.

Subsequent to the storm surge from Hurricane Dennis, extensive damage was done to all four of the restroom and shower facilities. In addition, the primary dune system was destroyed. All four buildings were closed, and this entire area of the State Park was closed. Though the Park is closed to motoring vehicles, park patrons can walk the beaches or take boats to the two beach use areas. It was therefore determined that the damaged structures were hazards, and the Franklin County Health Department determined that the four existing septic systems were no longer safe to use. The FDEP had the four buildings and septic systems removed due to the hazards they presented to park patrons. This decision was made by the Florida Parks Service in coordination with investigations and evaluations involving

the Park Service, FDEP, Franklin County and FEMA representatives. Following the demolition, the primary dune system that had been destroyed as a result of Hurricane Dennis is undergoing natural processes and is beginning to establish a new primary dune in an area previously located by the old restrooms and bath house / shower facilities.

1.5 Project Description

St. George Island State Park is a state-owned park that is utilized extensively by the public for access to the Gulf of Mexico. The storm damaged public restrooms and bath house facilities at the park were the only publicly owned and accessible buildings with restrooms and shower facilities for the users of St. George Island State Park. Hurricane Dennis heavily damaged all four restrooms at two locations and caused moderate damage to the picnic pavilions. As a result, all four restrooms were demolished after inspection by FEMA personnel. The pavilions, most notably the boardwalk access to them, will require repair. Project worksheets have been developed for those damages. The sewage systems serving the restrooms were also damaged and, after concurrence by the local Health Department authorities, were also removed. At St. George Island State Park, public outdoor recreation and conservation is the designated use of the property. These storm damaged public facilities were located at two sites on the beach, located between paved parking lots and the Gulf of Mexico.

The project consists of the replacement of the damaged public restrooms and bathing facilities at two sites within St. George Island State Park. This includes replacement of the structures, as well as the sewage disposal systems. Repair of the pavilion boardwalks will also occur.

Section 2 -Alternatives

Alternative courses of action were explored in depth. The restroom and bath house / shower facilities were heavily damaged by Hurricane Dennis, as were the sewage disposal systems. Two of the restrooms and bath house / shower facilities originally built in 1982 were a complete loss, while the other two restrooms and bath house / shower facilities, also built in 1982, were heavily damaged. All of the alternatives were evaluated based upon engineering constraints, environmental impacts, architectural considerations, structure longevity and visitor services criteria for St. George Island State Park. Budgetary impacts were considered, but were not the controlling factor. The analysis, thought processes and decisions leading to a *Preferred Alternative* were reviewed with FEMA personnel during the damage assessment phase, the FDEP, Bureau of Beaches and Coastal Systems during the Coastal Construction Control Line (CCCL) permitting phase and the Franklin County Building Department during the plan development phase. In addition, the United States Fish and Wildlife Service (USF&WS) and the Florida Fish and Wildlife Conservation Commission (FF&WCC) personnel have participated in informal consultations during the project evaluation process. Those discussions continue and remain on-going.

2.1 No - Action Alternative

The *No-Action Alternative* consists of not replacing or permanently relocating public beach restrooms and bath house / shower facilities at the West Beach Use Area and the East Beach Use Area of St. George Island State Park. None of these public services are currently being provided, and this portion of the Park is closed to visitors. The *No-Action Alternative* would result in there being no permanent structures available to service the sanitation and public health needs of the St. George Island State Park beach visitors. This *No-Action Alternative* does not fulfill the purpose and need of the project. Selection of this option would make services at this coastal recreational park unavailable to the visiting public and a decision would have to be made as to whether or not to keep this portion of the Park permanently closed, or bring in portable chemical toilets. Full restroom facilities are preferable to accommodate regular and concentrated visitation. Further discussions related to this alternative will refer to it as the *No-Action Alternative*.

2.2 Replace Reduced Facilities at Alternate Location (Preferred Alternative)

The *Replace Reduced Facilities at Alternate Location* consists of combining the two structures that were previously located at both the West Beach and East Beach Use Areas into one structure at each facility. The new facilities would be located between the parking lots that are located approximately 80 feet landward of the previous facilities' locations. The structures would be approximately 1,225 square feet in size and elevated 15 feet above sea level on concrete piling foundations. Access ramps would be constructed to provide access to the facilities; the ramps would be placed primarily within the adjacent parking lots. A lift system would be installed to provide handicapped access in compliance of the American with Disabilities Act (ADA). The parking lots would require minor re-configuration in order to accommodate the new facilities. Photographs of the pre-disaster lay-out of the West Beach Use Area, as well as the area between the parking lots where the new facility would be placed, can be seen in Appendix A, Photographs, Collection 1. Appendix A – Preferred Plans, Sheets 1 & 2 contains the site plans which indicate the proposed locations and layouts described here. The East Beach Use Area would be identical in layout.

Under this alternative, the facilities at both the West Beach and East Beach Use Areas would be composed of one structure that houses both a men's restroom/bath house and a women's

restroom/bath house. A new aerobic treatment disposal system would be installed to handle the effluent from the single facility at each site. With double the usage for each system (one system at each beach use area instead of the two separate systems at each beach use area which previously occurred), and with modern codes and standards related to the deposition of sewage waste materials, state-of-the-art systems were designed to handle the sewage and wastewater. The selected system collects the wastes from the restrooms/showers in a pre-treatment tank. From there it moves the waste to a pair of aerobic treatment tanks, and then on to a 3,000 gallon dosing tank. The sewage treatment system at each location would be located within the parking lot median area, immediately west of the new raised facility, and surrounded by a wooden fence. The sewage treatment elements of the plan are shown on Sheets 3, 4 & 5 of Appendix A – Preferred Plans.

From the dosing tank, treated waste would move under the parking lot to mounded trench drain fields via new underground pressure mains (3-inch in diameter). The drain fields would be located in the approximate location of the previous facilities' drain field locations. In the East Beach Use Area, the drain field would be northeast of the parking lot, while in the West Beach Use Area it would be to the southwest. In both locations, the drain fields would be two-foot high mounds, measuring approximately 125-feet long (perpendicular to the beach) and approximately 65-feet wide (parallel to the beach). The sands would taper up at a four to one slope to form the two-foot high mounds. Within these mounds, the treated liquids would be pumped into a series of perforated pipes for distribution into and through filter fabrics, graded aggregate and native sands. The mounded drain field areas would also be fenced for protection. The sites selected for the drain fields are off to the side of the parking lots, in areas not typically populated by beach visitors.

In the evaluation of this alternative, two options for placement of the advanced aerobic treatment disposal system were considered. A study was conducted to see if the new sewage systems could be placed within the central islands of the parking lots. It was determined that the central island was not large enough to accommodate the new, enlarged sewage treatment systems. It was therefore determined that the most practicable solution was to install the new treatment systems within the same general vicinity as the previous drain fields, adjacent to the parking areas.

The location of the new facilities would require a reconfiguration of the parking lot in order to accommodate the structure itself, as well as the access ramps. Each new restroom and bath house / shower facility would be placed in the central, unpaved island between the two paved parking areas, with a minimal reduction in parking (ten standard parking spaces). Each new restroom and bath house / shower facility would be centrally located for the convenience of all beach visitors at each beach use area. Since the new facilities would be located within 80 feet landward of the previous locations, a reasonable walking distance would be maintained for beach users.

Constructing a modern restroom and bath house / shower facility at the proper elevation at these locations would require extensive pedestrian access accommodations to comply with State and Federal ADA regulations (36 CFR 1191). Pedestrian access routes would be established within the parking lot central islands, thereby reducing the potential for environmental impacts along the beach use area. This alternative would also incorporate a lift system for ADA access, thus further reducing the environmental impacts associated with long ramped pedestrian access routes.

This *Replace Reduced Facilities at Alternate Location Alternative* was determined by the FDEP to be the most practical, cost-effective and environmentally-responsible solution to meet the Purpose and Need. This alternative would provide modern restroom and bath house / shower facilities within two structures versus the pre-storm four structures; the facilities would be built in accordance with current Statewide Building Code requirements. The 15-foot elevation on concrete pilings would minimize

future storm surge and flood damage, and is required by Franklin County building codes. The construction would require normal low rise construction equipment and/or drilling machinery. With the work site close to the existing paved parking lots and previously removed septic drain-fields, most of the equipment and materials storage, as well as lay down areas, would be in previously disturbed sand areas, between the parking lots or within the parking lot paved areas.

The replacement as proposed incorporates a reduced number of elevated boardwalk systems. The boardwalk system would be located in a way that is the least disruptive to shorebird and sea turtle use areas. Any dune areas in the immediate vicinity would be protected from construction activity disturbance, in consultation with the USF&WS and the FF&WCC. Protected areas would be called out in the construction contract plans and specifications, as well as on the job site with signs identifying an area of “No Intrusion” areas and/or “To Be Protected”¹. In addition, compatible beach-quality sands would be placed on the beach between the Gulf and the construction sites. These beach sands would be placed and shaped to mimic naturally occurring dunes and would prevent sea turtles from crawling up the beach and into the construction sites. It is intended that this dune-like feature would extend approximately 500-feet in length and overlap the proposed construction areas.

Further discussions throughout this document related to this Replace Reduced Facilities at Alternate Location Alternative will refer to it as the *Preferred Alternative*.

2.3 Restore to Pre-Disaster Locations with Elevated Facilities

The *Restore to Pre-Disaster Locations with Elevated Facilities Alternative* consists of replacing the damaged restrooms and bath house / shower facility structures as closely as possible to their pre-storm locations. Four structures would be installed, two each at the East Beach Use Area and the West Beach Use Area. The structures would be placed on piles, of sufficient length and strength to hold the structures above anticipated storm surges, with boardwalks and stairs providing access. The replacement septic systems would have to be upgraded over the pre-disaster systems to meet the current Franklin County Health Department codes. The Franklin County Health Department has indicated that current codes and standards require an aerobic treatment system with a low-pressure dosing system and more square footage for the septic fields than what is available in the existing locations. The new sewage systems would therefore occupy the same area on the property as the pre-disaster systems, with some septic drain-field enlargement to meet the current requirements. The location of the drain fields would be in the same location as the previous buildings’, which is the same as the two proposed for the *Preferred Alternative*. Because there is one additional building at each beach use area with this alternative, two more drain fields would be required and would be placed on the opposite sides of the parking lots. All four systems would be smaller than the two for the *Preferred Alternative*, but would provide approximating the same overall capacity. The holding tanks, aerobic treatment tanks, dosing tanks and pumps would be located immediately adjacent to the buildings, putting them 80 feet closer to the Gulf of Mexico than the *Preferred Alternative*, and subjecting them to more tidal and wave action. Force mains to the new drain field areas would be necessary, as would a mounded system of piping, filters, geo-fabrics and gravels and sands.

The location of the facilities within the West Beach Use Area would be as shown on the first photograph in Appendix A – Photographs – Collection 1. The restrooms and bath house / shower facilities are identified as units 2 and 4. The layout at the East Beach Use Area would be identical.

¹ Details and specifics can be found in Section 6 – Mitigation Measures and Permits.

The *Restore to Pre-Disaster Locations with Elevated Facilities Alternative* would place four rebuilt structures on the beach, displacing the new primary dune that has developed. The location is closer to the Gulf than the *Preferred Alternative*, making it more vulnerable to storm surges and flooding from the Gulf of Mexico. The elevation of the structures to approximately 15 feet above sea level, per current building code and permit requirements, would help alleviate some of the risk to the structures.

Pedestrian access routes would be established within the parking lot central islands, thereby reducing the potential for environmental impacts along the beach use area. This alternative would also incorporate a lift system for ADA access, thus further reducing the environmental impacts associated with long ramped pedestrian access routes. This alternative would require a more extensive boardwalk system than the *Preferred Alternative* because the grade elevation is approximately four feet lower at this location. Placing the new facilities 15-feet above sea level would make access to them somewhat more difficult. Typically, ramped walkways not exceeding 5% up slopes are required with flat areas every 30-inches (measured in the vertical). The total length of ramped walkway would exceed 300 lineal feet, covering a great deal more area than with the *Preferred Alternative*. As with the *Preferred Alternative*, this alternative would also incorporate a lift system for ADA access, thus reducing the environmental impacts associated with long ramped pedestrian access routes. The proximity to the storm surges would have to be taken into consideration when designing the lift system, possibly making it more expensive to armor against storm surges.

The Coastal Construction Control Line (CCCL) lies landward of the south edge of the parking lot. The original sites that would be reused with this alternative lie seaward of that line. Thus, a CCCL permit would have to be obtained from the FDEP to build these four buildings in a controlled area. The placement of septic systems seaward of the CCCL line may make it difficult to obtain a CCCL permit.

2.4 Alternatives Eliminated from Further Consideration

This section identifies and provides a brief description of those alternatives that were eliminated from further consideration because they did not meet the Purpose and Need or because they were impracticable, not feasible, economically unreasonable, or had significant adverse environmental, public safety and public health impacts. The three alternatives considered but eliminated from further study are discussed below.

2.4.1 *Restore to Pre-Disaster Locations and Conditions*

Replacement of the damaged restrooms and bath house / shower facility structures at their exact pre-storm location is physically possible. The location of the facilities within the West Beach Use Area would be as shown on the first photograph in Appendix A – Photographs – Collection 1. The restrooms and bath house / shower facilities are identified as units 2 and 4. A *Restore to Pre-disaster Locations and Conditions Alternative* would place four rebuilt structures on the beach, displacing the new primary dune. The structures would be placed on short piles, just as with the old buildings, with boardwalks and stairs providing access. The septic systems have been removed and would need to be replaced by new systems (four with this alternative). The septic systems would be located in similar locations as the *Restore to Pre-Disaster Locations with Elevated Facilities Alternative*, and they would be similarly sized and configured.

The Coastal Construction Control Line (CCCL) lies landward of the south edge of the parking lot. The original sites that would be reused with this alternative lie seaward of that line. Thus, a CCCL permit would have to be obtained from the FDEP to build these four buildings in a controlled area. Some elements of this alternative may not be acceptable under the current requirements of the CCCL.

Additionally, current Franklin County building codes require structures to be elevated 15-feet above sea level, which this alternative does not do.

At the completion of this alternative review, it was felt that the negatives involving the inadequacy of the room for replacement structures, the non-conformance to current construction codes, the exposure of the facilities to storm surges and the environmental impacts to the new primary dune system were significant enough to eliminate this alternative from further consideration. Therefore, the *Restore to Pre-disaster Locations and Conditions Alternative* was dropped from further consideration and not carried forward in the study process.

2.4.2 Replace Identical Facilities at Alternate Location

Replacing identical facilities at alternate locations was considered. Two such project layout options were considered.

The “first layout option” considered locating the restrooms and bath house / shower facility structures approximately 80-feet landward of the destroyed facilities, immediately to the east and west of the parking lot. This “first layout option” would still provide a relatively short walking distance to the shoreline for beach visitors and would maintain an identical number of restroom and bath house / shower facility amenities as the pre-storm condition, while maintaining the parking lot capacities. The existing sewage disposal systems would require complete replacement and the septic drain fields would be located landward of the restroom facility structures.

The “second layout option” considered moving the restrooms and bath house / shower facility structures approximately 300 feet landward of the destroyed facilities, immediately to the east and west of the parking lot. This “second layout option” would require a relatively long walking distance to the shoreline for the public beach user, but would maintain an identical number of restroom and bath house / shower facility amenities as the pre-storm condition and maintain the existing parking lot capacities. The existing sewage disposal systems would require complete replacement and the septic drain fields would be located landward of the restroom facility structures.

It was determined that the restrooms and bath house / shower facility structures could not be located within the existing paved parking lot, as it would require a reduction in parking spaces that would likely exceed 20 standard parking spaces. This was deemed excessive and inconsistent with the park’s level of service need for projected visitation. Therefore, either of these layout options would require placement of the new construction within undisturbed, pristine beach areas, albeit immediately adjacent to previously-disturbed areas associated with the parking lot construction. Further, constructing a modern restroom and bath house / shower facility at the proper elevation at these locations would require extensive pedestrian access accommodations to comply with State and Federal ADA regulations, possibly leading to adverse environmental impacts along the beach use area. For those reasons, these layout options were determined to have potential adverse environmental impacts. Additionally, the “second layout option” was thought to locate the restroom and bath house / shower facility too distant from the beach use area while providing no appreciable benefits. Upon further consideration, it was determined that the replacement of the septic fields and bringing them to conformance with current codes for either layout option resulted in excessive construction costs and resulted in potential shorebird habitat impacts. For these reasons, and because these options did not possess any advantages over the alternatives taken forward for further consideration, the *Replace Identical Facilities at Alternate Location Alternative* was dropped from further consideration.

2.4.3 *Replace Reduced Facilities at a Remote Location*

This alternative was under consideration to combine the benefits of the *Preferred Alternative* by reducing the number of structures and by placing them in previously disturbed areas, and the added benefit of a greater setback from the shore to reduce future wave and storm surge actions. The remote location under consideration was the center island of the parking lots, similar to the *Preferred Alternative*, however at the extreme landward end of that island.

The Hurricane Dennis storm surge carried beach sands all the way to the dune line north of the roadway. Thus, this alternative, while more remote than the *Preferred Alternative*, and reducing the future damage potential, would not result in a significant reduction to future damage. The negative impacts of such a remote location are similar to those discussed with the second layout option discussed in Section 2.4.2, above. The slight increase in storm surge protection was determined to be not sufficient enough to outweigh the negatives of being too distant from the beach to be used effectively. For these reasons this alternative was dismissed from further consideration.

2.4.4 *Replace and Relocate Outside the Floodplain*

Since the pre-existing restrooms and bath house / shower facility structures were located within a mapped 100-year floodplain, and since all the other alternative locations considered are also in the floodplain, relocation to a site out of a mapped 100-year floodplain was examined. A check of Flood Insurance Rate Maps (FIRM maps) revealed that there is no land within the beach area sites of St. George Island State Park that is outside of the floodplain. All land on the St. George barrier island is within the 100-year floodplain. This alternative was therefore dismissed from further consideration.

Section 3 -Affected Environment² and Environmental Consequences

This section addresses specific information related to environmental resources, sensitive issues, locations of interest, obstructive features, avoidance measures, and impacts that may occur as a result of the project. Tabular data, as appropriate, and a Summary Table are included to provide a more comprehensive picture and understanding of the issues for the repair or replacement of the storm damaged public restrooms and bath house beach facilities. Environmental resource issues and areas identified as potentially impacted by the proposed action, or that require discussion pursuant to applicable laws and regulations, are addressed in this section. Proposed mitigation is referenced and/or discussed within the respective environmental issue area.

3.1 Physical Environment

3.1.1 Topography and Soils, Geology, Seismicity (including Executive Order 12699)

Topography

St. George Island State Park is situated on the Gulf Barrier Chain and is a narrow island created by wind and storm deposited sands; it is located along the southern edge of the Apalachicola Coastal Lowlands of the Gulf Barrier Chain. The eastern eight to nine miles of the island comprise the St. George Island State Park. The low dunes and over wash areas occupy most of the shoreline, sand dunes and adjacent communities along the Gulf side of the island. The undulating dunes range from two to 25-feet. Many of the larger dunes were damaged during hurricane Opal (1995) and Dennis (2005) with some height having been lost. The dunes are and will recover some size, but progress is and will continue to be slow.

On the sound side of the island, Rattlesnake Point Peninsula is an area of ancient dune activity where relict dunes range from about five to ten feet above sea level with one relict dune reaching 21-feet. The eastern end of the island is accreting. The topography here is low and highly dynamic. As time goes on, these dunes are expected to grow beyond the three to five feet currently exhibited.

Exhibits 4 and 5 (Appendix A) contain the USGS topographic maps for the project area.

No impacts to topography are anticipated from any of the alternatives considered.

Seismicity

The project area is located in northwestern Florida along a belt of mostly seaward-facing normal faults that border the northern Gulf of Mexico in westernmost Florida, southwestern Alabama, and southern Mississippi, all of Louisiana, southernmost Arkansas, and eastern and southern Texas (Ewing and Lopez, 1991 #2023). This belt of gulf-margin normal faults from Florida through Texas has strikingly low historical seismicity; the stress field and seismogenic potential of the underlying crust are unknown; the ability of the fault belt to generate significant seismic ruptures that could cause damaging motion is unclear. Accordingly, the fault belt is assigned to Class B³. The project area is identified as being in the lower hazard zone (2-4%g)⁴ for ground shaking, as indicated in Ground

² Information on the affected environment extracted and paraphrased from the “Dr. Julian G. Bruce St. George Island State Park Unit Management Plan”; State of Florida Department of Environmental Protection, Division of Recreation and Parks, February 7, 2003.

³ Gulf-margin normal faults, Alabama and Florida (Class B) No. 2654; <http://qfaults.cr.usgs.gov> . Class B is defined as: Geologic evidence demonstrates the existence of Quaternary deformation, but either (1) the fault might not extend deeply enough to be a potential source of significant earthquakes, or (2) the currently available geologic evidence is too strong to confidently assign the feature to Class C but not strong enough to assign it to Class A.

⁴ G or g is the force of gravity (an acceleration equal to 9.78 meters/second²). When there is an earthquake, the forces caused by the shaking can be measured as a percent of the force of gravity, or percent g.

Shaking Hazards of Earthquakes⁵ (Appendix A - Exhibit 6). This exhibit shows the peak acceleration (%g) with 2% probability of exceedance in 50 years, as identified in the zone of 2-4%g. Generally, the earthquake frequency expected throughout the entire State of Florida is the same as the project area.

The most recent Florida earthquake occurred on November 18, 1952, a slight tremor was felt by many at Quincy, a small town about 20 miles northwest of Tallahassee. Windows and doors rattled, but no serious effects were noted. Because of the extremely low ground shaking hazard, Executive Order 12699 (EO 12699), Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, does not apply. Special seismic related design criteria are not required for construction projects in this project area. There are no adverse seismic impacts associated with any of the alternatives considered.

Geology

A structural feature known as the Apalachicola embayment has influenced the geology of St. George Island. This embayment feature has existed since at least the Miocene, or approximately 30 million years before present (mybp), and has been accumulating sediments since that time. The limestone beds lay approximately 300-feet below the current surface of St. George Island. The deeper, older Bruce creek and St. Mark's formations of the late Oligocene to middle Miocene (20-30 mybp) are composed of limestone built from calcareous shells of mostly mollusks, but also ostracods, bryozoans, algae, corals, sea urchins and benthic and planktonic foraminifera. The species assemblage present in these limestones suggest that they were deposited under near-shore, warm, shallow, sometimes shoaling seas that were very similar to those occurring around the present-day Florida Keys.

The overlying Intra-coastal formation of the late Miocene to middle Pliocene (5-20 mybp) is composed largely of poorly consolidated, sandy limestone. The variable faunal assemblages indicate diverse maritime conditions during deposition. The prevalence of planktonic foraminifera in the lower portions of this formation indicates that it was probably deposited under deeper seas, perhaps as deep as 300 to 600-feet. The presence of other fossils and a deposition hiatus suggest that sea levels fluctuated substantially during this time, but generally were receding until near-shore estuarine and marine conditions again prevailed during the late Pliocene and early Pleistocene (2-5 mybp) when the molluscan-rich Chipola and Jackson Bluff formations were deposited. These formations were subsequently covered by 50 to 70-feet of unconsolidated, cross-bedded and inter-bedded sands, clays and other clastics, which are typical of a prograding delta and fluctuating sea levels.

St. George Island did not exist in its present form until relatively recently, as the presence of mollusk reefs 10 to 20-feet below the surface in many areas indicates that estuarine conditions prevailed where the island now stands. Estuarine and fluvial sediments 30 to 40-feet below the surface have been radiocarbon dated at around 28,000 to 40,000-years old. In general, the oldest portion of the island, the Gap Point Peninsula, is estimated to be less than 3000-years old.

The island initially developed from two offshore shoals, which emerged during slightly lower sea levels. Three separate small islands which were present less than 1000-years ago slowly merged into the current island configuration. These dynamic changes in its recent geologic history indicate that continued alterations in St. George Island's shape, size and topography are inevitable. St. George Island is expected to continue on a slow migration landward as sea levels rise.

⁵ USGS website http://earthquake.usgs.gov/hazmaps/products_data/2002/2002April03/US/US5hz2500v4.pdf

Soils

Seven soil types have been identified on St. George Island. These include Beaches, Dirego and Bayvi Tidal Soils, Corolla Sand, Duckston sand, Rutledge fine sand, Newhan Corolla complex, Duckston-Rutledge-Corolla complex and Duckston-Bohicket-Corolla complex. Most of the island is comprised of highly dynamic beach and dune systems. The two proposed replacement and relocation areas West Beach Use Area and East Beach Use Area are located in Corolla Sand areas. Corolla Sand is somewhat poorly drained, nearly level or gently sloping soil on flats and small dunes and in swales on large dunes along the gulf coast beaches. The Corolla soil has a seasonal high water table at a depth of 18 to 36 inches for three to six months in most years. Flooding can occur during severe coastal storms. The available water capacity is low. Permeability is very rapid. Natural fertility and the content of organic matter are low. Management activities would follow generally accepted Best Management Practices (BPMs) established in the Florida Department of Agriculture and Consumer Services (FDA&CS) 1993 Sericulture Best Management Practices to prevent soil erosion and conserve soil and water resources on site. There are likely to be no impacts to this soil type, regardless of the alternative course of action chosen.

A soils map of St. George Island State Park can be found in Appendix A as Exhibit 7.

Prime Farmland

The Farmland Protection Policy Act (FPPA) [*PL 97-98, Sec. 1539-1549; 7 USC 4201, et seq.*], which states that federal agencies must “minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses,” was considered in this EA. No farmlands of any type are located near the project location. Further, the entire St. George Island is made up of quartz sands, a nonagricultural use. No further consideration of FPPA is required.

3.1.1.1 No-Action Alternative

The *No-Action Alternative* would have no impacts on topography, soils, or prime farmland. There would be no seismicity impacts.

3.1.1.2 Preferred Alternative

The *Preferred Alternative* would have no impacts on topography, soils, or prime farmland. There would be no seismicity impacts.

3.1.1.3 Restore to Pre-Disaster Locations with Elevated Facilities

The Restore to Pre-Disaster Locations with Elevated Facilities would have no impacts on soils or prime farmland; there would be no seismicity impacts. This Alternative would have impacts on topography, however, because it would interfere with the accretion of the primary dune that is currently developing at this location.

3.1.2 Water Resources and Water Quality

Surface Water

St. George Island is located at the southern edge of the Apalachicola River Drainage Basin and serves as a protective barrier between the marine waters of the Gulf of Mexico and the estuarine waters of Apalachicola and St. George Sound. The Apalachicola River discharges an average of 16 billion gallons per day into the Apalachicola Bay. These Apalachicola River waters are identified as Class II waters. Florida Surface Water Classifications are established according to designated uses. Class II waters are those designated as “Shellfish Propagation or Harvesting” according to their present and

future most beneficial uses. The large influx of fresh water substantially lowers the salinity of the bay side of the island.

Class I surface waters are “Potable Water Supplies”, while Class III waters are classified as “Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife”. Class III is the statewide default classification intended to meet the goal of the federal Clean Water Act (*i.e.*, all waters should be “fishable/swimmable”).⁶

The water quality reported by the Florida Department of Health for the public beach areas along the Gulf of Mexico side of St. George Island State Park during March of 2006 was “**Good**” for *Enterococcus* [0-35 *Enterococcus sp per 100 ml of marine water*], *Enterococcus* Geometric Mean [0-35 CFU/100mL *Enterococcus sp Geometric Mean*], and fecal coliform [0-99 *fecal Coliform organisms per 100ml of marine water*].⁷

Due to the extensive porosity of the overlying sands, drainage on the island is almost exclusively subsurface. Only occasional surface waters are present. These typically occur as elongated inter-dune swales of relict dune systems on the older portions of the island. In addition to these depression marshes, a large, shallow coastal Dune Lake lies near the eastern tip of the island. Two deep borrow pits have succeeded into what are essentially small lakes near the campground, but they are not in the vicinity of the East Beach Use Area or West Beach Use Area.

Storm water runoff drains to the surrounding Gulf of Mexico and estuarine waters of Apalachicola Bay and St. George Sound waters and/or percolates through the area soils and beach sands.

The estuarine and marine waters that surround the island subject the shorelines to tidal influences. Mean high and mean low tides normally vary about 2.6-feet daily, but may substantially exceed this during tropical storms and hurricanes. Five to six foot storm surges are expected about every ten years and eight to ten foot storm surges are expected every 50 to 100-years. Storm tides significantly affect the island’s ground and surface waters, as well as estuarine areas behind the island.

None of the alternatives would involve waters regulated by Section 404 of the Clean Water Act. A U.S. Army Corps of Engineers (USACOE) Section 404 Permit would not be required for any of the alternatives.

None of the alternatives, if built, would have any measurable affect on surface waters. The permeability of the beach sands and the proximity of the Gulf of Mexico would absorb any and all runoffs. The small impervious area associated with each of the proposed structures is virtually miniscule when compared to the surface area of St. George Island State Park, St. George Island, the Gulf of Mexico and Apalachicola Bay.

Temporary construction activities would also have no measurable negative impacts on surface waters. Most of the construction activities would be either based on the paved parking lots, or be supported by concrete piles placed into the sand. The excavations for the various parts of the sewage systems would remove the surface sands and expose the underlying sands for the time necessary to install the equipment. They would then be recovered by beach sands. The contractor would be responsible for guaranteeing that no accidental spills that could migrate to the waters of the Gulf of Mexico would occur, and would likely do so with Best Management Practices (BMP’s). Appropriate erosion control

⁶ Water Body Classifications Nutrient TAC meeting May 27, 2004, “Florida Surface Water Classifications”.

⁷ The Florida Department of Health; Beach Water Sampling Franklin County, St. George Island State Park, January 2006 through March 2006.

and BMPs will be utilized to minimize any impacts resulting from parking lot runoff, erosion and/or sedimentation during construction. Possible BMPs that could be implemented include siltation fences, impervious barriers, and/or straw bales to prevent or contain spills or excessive flows. The FDEP has the expertise for the work, for the locale, and for the industry to identify BMP's for the contractor and to evaluate any suggestions for alternates from the contractor.

Groundwater

The Floridan Aquifer underlies the entire region. At St. George Island State Park, it is approximately 50 to 75-feet below sea level, occurring primarily within the Bruce Creek limestone and the intracoastal formation. Slightly permeable shell beds and then relatively impermeable clays overlie these strata. The clays may act as an aquiclude and impart artesian characteristics to the underlying aquifer, but also restrict surface water recharge to the aquifer. Because freshwater recharge is absent and because the island is surrounded by marine and estuarine waters, the Floridan Aquifer under St. George Island is infiltrated with salt water and is generally non-potable. The most significant ground water sources on St. George Island are the shallow water table aquifers occurring within the upper 25 to 30-feet of sands, underlain with an impermeable clay layer. This aquifer is completely dependent on rainfall directly on the island, which averages about 56-inches annually. Depletion of this aquifer is a possibility, especially during extensive droughts.

There are no wells on St. George Island State Park; a privately-owned and operated potable water system provides water service to the park through water mains from the mainland and carried across the Apalachicola Sound on the County Highway 300 Bridge from Eastpoint to the island.

None of the alternatives are expected to measurably impact groundwater. The structures will not impact groundwater directly. The septic system is not expected to impact groundwater because the drain fields contain clean, treated water only. There is a potential for stormwater pollution impacts from the septic system and drain fields, but these impacts are not probable. The septic systems will be properly maintained to ensure that no discharge of contaminated water occurs to the drain fields. With properly maintained septic systems, no contaminated water will be discharged to the shallow water table.

Impacts during construction will be minimized through the use of BMPs to prevent the discharge of contaminated surface waters which could impact the shallow aquifer. If an accidental spill were to occur during construction, the contractor will be responsible for minimizing the amount spilled and for any clean-up required. Federal and state regulations regarding the reporting and clean-up of accidental spills will be complied with.

3.1.3 Floodplain Management (Executive Order 11988)

Executive Order 11988 (EO 11988) requires federal agencies to take action to minimize occupancy and modification of the floodplain. Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives. FEMA's regulations for complying with EO 11988 are promulgated in *44 CFR Part 9*.

FEMA applies the "Eight-Step Decision-Making Process" to ensure that it funds projects consistent with EO 11988. The NEPA compliance process involves essentially the same basic decision-making process to meet its objectives as the "Eight-Step Decision-Making Process".

3.1.3.1 *No-Action Alternative*

The location of the West Beach Use Area and the East Beach Use Area are both within the 100-year floodplain of the Gulf of Mexico. Please refer to Appendix A – Exhibit 9, Flood Insurance Rate Map (FIRM) 12037C0559E for the West Beach Use Area, and Appendix A - Exhibit 10, Flood Insurance Rate Map – FIRM 12037C0576E for the East Beach Use Area. Appendix A - Exhibit 11, Table Explaining Zones of FIRM maps, can be referenced for explanations. The former public restrooms / bath house facilities were located in Zones AE and VE, flood insurance rate zones that corresponds to areas that have a 1-percent chance of coastal flooding within any year, and have additional hazards associated with storm waves.

The *No-Action Alternative* would have no adverse effect on the floodplain. The Corolla Sands would accept and absorb storm waters as beach sands do.

3.1.3.2 *Preferred Alternative*

The locations of the facilities proposed by the *Preferred Alternative* are within the general vicinity of the previous facilities, identified by the FIRM maps referenced above. The *Preferred Alternative* places the facilities within the floodplain, exposing the new public restrooms / bath house structures to future flood and storm wave action events. The proposed replacement and relocation areas for the public restrooms / bath house facilities, along with their existing parking lots, remain located within the same FIRM Zones, AE and VE.

The West Beach Use Area Site Plan, included as Appendix C - Sheet 1, shows the restroom and bath house shower facility structure to be generally within FEMA Flood Zone VE and the septic system drain fields and paved parking lot within FEMA Flood Zone AE. The East Beach Use Area Site Plan, included as Appendix C - Sheet 2, shows the restroom and bath house shower facility structure, as well as the septic system drain fields and paved parking lot to be generally within FEMA Flood Zone VE. This information is also available from the FEMA FIRM maps, Appendix A – Exhibits 9 & 10, with an explanation of the codes as Exhibit 11.

The risks to the structures from flood events would be minimized by ensuring that local construction codes and the regulatory floodplain requirements for the AE and VE zones are followed. The facilities would have specified minimum floor elevations required by the local floodplain ordinance and by local codes. While the entire island can be flooded with a 100-year storm event, all practicable measures have been taken to place and construct the public facilities in a location and at an elevation that are consistent with the public's needs and for the use of the beach areas, and conform to codes, regulations and sound engineering.

Impacts resulting from the replacement and relocation of these facilities to the floodplain include minor amounts of fill and the resulting negligible loss of stormwater storage. This fill amount would be insignificant compared to the amount of storage available for St. George Island and the Gulf of Mexico. Short term impacts to the floodplain may occur as a result of construction activities. Appropriate erosion control and BMPs would be utilized to minimize any impacts.

There are no practicable alternatives to building in the floodplain for these facility replacements that meet the purpose and need for public recreational use of the beaches. The entire St. George Island State Park is located within the 100-year floodplain. Avoidance of the 100-year floodplain therefore does not allow for accomplishing the Purpose and Need of this

project. During a flood event, these public use facilities would not likely be called upon for use. The facilities would be designed to withstand the onslaughts of weather with sufficient resilience to be put back into service in a short time.

3.1.3.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The location of the facilities under this alternative places them precisely where they were prior to Hurricane Dennis, but at an elevation that would keep the decks and restrooms above the anticipated wave and storm surge elevations.

Wind blown and tidal surge driven waters would not affect the facilities themselves, but the sewage disposal system, at least the parts above ground, would be susceptible to water damages. The pre-treatment tanks, the aeration tanks and the dosing tanks would be just at ground level on the beach, and at risk. The piping to and the drain fields would be below grade, and therefore protected.

The risks to the structures from flood events for this alternative are greater than those for the Preferred Alternative because they are 80 feet closer to the Gulf of Mexico. Risks would be minimized by ensuring that local construction codes and the regulatory floodplain requirements for the AE and VE zones are followed. The facilities would have specified minimum floor elevations required by the local floodplain ordinance and by local codes. During a flood event, these public use facilities would not likely be called upon for use. The facilities would be designed to withstand the onslaughts of weather with sufficient resilience to be put back into service in a short time.

Impacts resulting from the replacement and relocation of these facilities to the floodplain are similar to the Preferred Alternative and include minor amounts of fill and the resulting negligible loss of stormwater storage. The fill amount would be insignificant compared to the amount of storage available for St. George Island and the Gulf of Mexico. Short term impacts to the floodplain may occur as a result of construction activities. Appropriate erosion control and BMPs would be utilized to minimize any impacts

Per 44 CFR Part 9, the full 8-step process is required for this project and has been incorporated into the NEPA process as part of this EA. Disaster-wide initial public notice was published state wide, with publication in the Pensacola News Journal on September 21, 2005. Final public notice will be published in the Apalachicola Times on 06/29/2006.

3.1.4 *Air Quality*

The National Ambient Air Quality Standards (NAAQS), established by the U.S. Environmental Protection Agency (USEPA), set maximum allowable concentration limits for six criteria air pollutants to protect the public health, safety, and welfare as a result of the Federal Clean Air Act of 1970 (CAA). The Clean Air Act Amendments of 1990 (CAAA), [42 USC 7401, *et. seq.*], mandated a reduction in the emissions of the following six criteria pollutants: nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), lead (Pb), ozone (O₃), and particulate matter (PM, microscopic solid or liquid particles suspended in air). Areas in which air pollution levels persistently exceed the NAAQS may be designated as “non-attainment.” States in which a non-attainment area is located must develop and implement a State Implementation Plan (SIP) containing policies and regulations that will bring about attainment of the NAAQS.

No portion of this project is within a designated non-attainment area for any of the criteria air pollutants (<http://www.epa.gov/region4/air/naaqs/naaqs.htm>) per the USEPA Region 4 web site, as last updated on Friday, October 19th, 2005. The project does not involve increasing automobile traffic in the area or increasing traffic capacity, and does not have the potential to change emissions; therefore, an air quality conformity determination under "*Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved under Title 23 USC or the Federal Transit Act*" [40 CFR Part 93] is not required.

3.1.4.1 *No-Action Alternative*

There would be no replacement, relocation, or construction activities associated with this alternative. *The No-Action Alternative* would not affect air quality.

3.1.4.2 *Preferred Alternative*

The *Preferred Alternative* has the potential to have short-term air quality impacts due to construction equipment. The air quality impacts would be short-term, occurring only while construction work is in progress. Replacement, permanent relocation and construction of the public restroom / bath house structures would require grading for the preparation of the sites and the septic system drain-field and mound locations. Construction equipment would generate a minimal amount of fugitive dust (particulate matter). Other emissions would be from the exhaust of construction equipment. Vehicles used by construction crews to reach the work site would also generate engine exhaust emissions; these would be expected to be insignificant. Although significant air quality issues associated with the implementation of this alternative are not expected to occur, the project should incorporate appropriate measures to control fugitive dust.

Dust and airborne dirt generated by construction activities shall be controlled through general dust control BMPs or a specific dust control plan could be developed if warranted. The contractor and St. George Island State Park personnel will meet to review the nature and extent of potential and known dust-generating activities and will cooperatively develop specific types of control techniques that may be appropriate to the project and local situations. Some of the techniques that may warrant consideration include measures such as minimizing the tracking-out of soil onto nearby publicly-traveled roads, reducing speed on unpaved surfaces, covering (tarpaulin-covered) haul vehicles, and applying water to exposed surfaces, particularly those on which construction vehicles travel. Any burning of materials, vegetation or debris would be undertaken according to relevant State of Florida, local laws and ordinances, including, but not limited to, the current St. George Island State Park ordinances or regulations of the FDEP. Appropriate traffic control plans may also serve to limit localized concentrations of airborne emissions during construction.

If project activities include the stockpiling of sands on-site, the project applicant will be required at the direction of the engineer to cover these sands to help prevent fugitive dust and erosion. Fencing and straw/hay bales should be installed to reduce loss. Following construction activities, exposed, compacted sands would be graded and restored.

No permanent air quality impacts are expected from the operation of the facility. The *Preferred Alternative* would not change the total regional emissions of pollutants. The area to be covered by the facility's services remains the same and the distribution of trips within and outside St. George Island State Park and the beach areas are not expected to change as a result

of constructing the *Preferred Alternative*; there should be no significant statistical difference in the distances traveled annually.

The *Preferred Alternative* does not have the potential for long-term, adverse air quality effects and none are anticipated.

3.1.4.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The impacts of implementing the *Restore to Pre-Disaster Locations with Elevated Facilities* are precisely the same as with the *Preferred Alternative*, as discussed above.

3.1.5 *Coastal Zone Management*

The Coastal Zone Management Act (CZMA) encourages states to preserve, protect, develop, and, where possible, restore or enhance valuable natural coastal resources. Participation by states in the CZMA is voluntary. To encourage states to participate, the act makes federal financial assistance available to any coastal state or territory that is willing to develop and implement a comprehensive coastal management program. The federal government has accepted that each state that develops and implements a program to protect their coastal zones has the ability and right to issue permits for any project that could impact these areas, even if the project is a federally-aided or a federally implemented one.

Federal consistency has become a prime concern with the regulatory agencies, and ways and means to obtain consistency are being implemented in all jurisdictions. From the Florida State Statutes, Chapter 380, Section 380.23, the following is related to Federal consistency: “When a federally licensed or permitted activity subject to federal consistency review requires a state license, the issuance or renewal of a state license shall automatically constitute the state's concurrence that the licensed activity or use, as licensed, is consistent with the federally approved program.”

The Coastal Construction Control Line Program (CCCL) is an essential element of Florida's coastal management program. It provides protection for Florida's beaches and dunes while assuring reasonable use of private property. This program establishes a line along sandy beaches within the State for which any work occurring seaward of the line requires a FDEP permit. The line is established on each beach based on a 100-year storm event and establishes the landward limit of jurisdiction. The CCCL line for the project area is shown on the Site Plans for each Use Area, Appendix A, Preferred Plans, Sheets 1 & 2. In both areas, the CCCL line is landward of the entire parking lot, with only small portions of the roadway bypassing the parking lots lying landward of the CCCL line.

3.1.5.1 *No-Action Alternative*

The *No Action Alternative* would have no impacts on Coastal Zone Management issues.

3.1.5.2 *Preferred Alternative*

The *Preferred Alternative* is located seaward of the CCCL at both beach use areas, and thus is in need of a permit from the FDEP. Permit number FR-805 has already been issued by the FDEP. By issuance of this permit, FDEP and all of the cooperating and reviewing agencies have agreed that the *Preferred Alternative* is in compliance with the CZMA. A copy of this permit is contained as Item No. 1 in Appendix F. Special conditions have been developed in cooperation between the FDEP, the FWC, FEMA and the USF&WS, and have been incorporated into the permit requirements.

3.1.5.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The *Restore to Pre-Disaster Locations with Elevated Facilities Alternative* is located seaward of the CCCL at both beach use areas, and thus is in need of a permit from the FDEP. No permit has been reviewed or issued by the FDEP for this alternative. If this alternative were chosen, a CCCL permit would have to be applied for,

3.1.6 *Coastal Barriers Resources*

While portions of Saint George Island are located within Coastal Barrier Resources Act (CBRA) units, the areas impacted by the replacement buildings within the state park are not located within a CBRA unit, rather they are in an “Otherwise Protected Area.” Exhibit 12 in Appendix A indicates that the Santa Rosa Island Unit’s (CBRA Unit FL-90) western border is located approximately one mile east of the replacement building. A CBRA Otherwise Protected Area (Unit FL-90P, Saint George Island) is located approximately two miles to the west, a mile and a half to the north, and over four miles to the east of the replacement buildings. There are no impacts to CBRA units from any of the alternatives.

3.2 Biological Environment

3.2.1 *Terrestrial and Aquatic Environment*

The local terrestrial and aquatic environment consists mainly of sandy beach and the associated Gulf of Mexico.

Found within St. George Island State Park are a number of natural communities. The upland natural communities include beach dune, scrub, scrubby flatwoods, coastal grasslands and mesic flatwoods. The wetland communities include wet flatwoods, depression marsh, estuarine tidal marsh, coastal dune lake and estuarine mollusk reef. These features and communities provide for a broad array of *recreational and educational opportunities for park visitors.*

3.2.1.1 *No-Action Alternative*

The *No-Action Alternative* would not involve the terrestrial or aquatic environment.

3.2.1.2 *Preferred Alternative*

Since the *Preferred Alternative* area and relocation site is disturbed from the presence of the paved parking lots and the demolition of the former storm damaged public restrooms and bath house facilities, no impacts to the terrestrial or aquatic environment are anticipated at the replacement structure locations. The new septic fields would be constructed in and around one of the two drain fields’ previous locations at each beach site location. These areas have been previously disturbed.

3.2.1.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

Since the *Restore to Pre-Disaster Locations with Elevated Facilities* beach sites are disturbed from the presence and demolition of the previous restrooms and bath house shower facility structures, no impacts to the terrestrial or aquatic environment are anticipated at the replacement structure locations. The new septic fields would be constructed in and around two of the two previously disturbed areas at each beach site location.

3.2.2 Wetlands (*Executive Order 11990*)

Executive Order 11990 (EO 11990), Protection of Wetlands, requires federal agencies to take action to minimize the loss of wetlands. FEMA's regulations for complying with EO 11988 are promulgated in *44 CFR Part 9*. The NEPA compliance process also requires the identification of any direct or indirect impacts to wetlands which may result from federally funded actions.

FEMA applies the "Eight-Step Decision-Making Process" to ensure that it funds projects consistent with EO 11990. This process is the same process as required for compliance with EO 11988 (Floodplain Management). The NEPA compliance process involves essentially the same basic decision-making process to meet its objectives as the "Eight-Step Decision-Making Process".

The National Wetland Inventory (NWI) map depicting wetlands in Franklin County, Florida by the USF&WS Geocortex Internet Mapping Framework Wetlands Online Mapper was examined for information related to the presence of wetlands within the project area. The NWI maps (Goose Island and Sugar Hill Quadrangle) indicate that there are no wetlands involved with the proposed sites. Additionally, the soil type present at the proposed sites is Corolla sand, 0 to 5-percent slopes, rarely flooded (U.S. Natural Resource Conservation Service (NRCS) Soil Survey of Franklin County). This soil is not on the state hydric soils list. An environmental resource map indicating the NWI identified wetlands located in the project vicinity can be found in Appendix A – Exhibit 13.

Photographs were taken during a site visit and are shown in Appendix A, Photographs, Collections 1 and 2. From the photographs, soil survey, and the NWI data, a Professional Wetland Scientist confirmed that wetlands are not directly or indirectly associated with the proposed site. Thus, wetlands are not involved with nor impacted by the project.

3.2.3 Threatened and Endangered Species⁸

The West Beach Use Area and the East Beach Use Area of St. George Island State Park have been routinely visited by and utilized for nesting by sea turtles. Loggerhead (*Caretta caretta*) [threatened], green (*Chelonia mydas mydas*) [endangered], and leatherback (*Dermochelys coriacea*) [endangered] sea turtles are those most often encountered. The loggerheads and greens are known to utilize the beach, and many nests have occurred here over the years.

Two other federally protected species are also known to utilize St. George Island State Park. Piping plovers (*Charadrius melodus*) [threatened] utilize the park in the winter for foraging. The park is located within an area designated as critical habitat by USF&WS for this species (FL-9 unit). Bald eagles (*Haliaeetus leucocephalus*) [threatened] are known to utilize the park between October 1st and May 1st for nesting.

In addition to federally protected species, there are several state protected species that utilize St. George Island State Park. Snowy plovers (*Charadrius alexandrinus tenuirostris*) [threatened] are known to nest and forage within the park, least terns (*Sterna antillarum*) [threatened] are known to nest within the park, and American oystercatchers (*Haematopus palliatus*) [species of special concern] are known to nest and forage within the park.

The USF&WS works closely with the FDEP to establish ways to protect and preserve endangered species habitat. Currently biologists patrol the approximate eight miles of St. George Island State Park

⁸ Op. cit., "Dr. Julian G. Bruce St. George Island State Park Unit Management Plan"; State of Florida Department of Environmental Protection, Division of Recreation and Parks, February 7, 2003

beach in the early mornings of the nesting season looking for any evidence of sea turtle activity. When a nest is discovered, it is located by GPS and the biologists take steps to fence it off from predators and human interference, so as to minimize intrusion into the natural maturation process. No turtles have ever been known to ascend to the area where the proposed construction would occur, in an area beyond the berm and parallel to the shore.

Pursuant to the Endangered Species Act (ESA) and/or the Fish and Wildlife Coordination Act (F&WCA), FEMA has requested informal consultation with the USF&WS. The USF&WS and National Marine Fisheries Service share Federal jurisdiction for sea turtles; USF&WS has lead responsibility on the nesting beaches and the National Marine Fisheries Service is responsible for the marine environment. USF&WS has provided information on the project's potential to impact federally protected species. Additionally, FEMA has obtained information on the potential for the presence of any state protected species from the FFWCC. The FFWCC classifies listed species in three categories – endangered, threatened and species of special concern. Copies of correspondence requesting consultation and information from these agencies, as well as their responses, can be found in Appendix C.

3.2.3.1 *No-Action Alternative*

The *No-Action Alternative* would not impact threatened or endangered species in the area, or critical habitat.

3.2.3.2 *Preferred Alternative*

The *Preferred Alternative* is not likely to adversely affect threatened or endangered species. To date, no turtles have been known to ascent to the beach area where the proposed construction would occur. With regards to nesting and foraging birds, the new facilities would be constructed within disturbed areas located between parking lots, thereby minimizing the probability that these areas would be utilized by birds.

In addition, FDEP has agreed to comply with mitigation measures suggested by USF&WS. These measures include:

1. Monitoring of shorebird presence and activities by Park staff from January 27, 2006 until project construction is complete.
2. Daily sea turtle nesting surveys, beginning on May 1, 2006 by park staff, to continue until September 1st.
3. Tarps or plastic material will be placed over the proposed sites for the two sewage disposal drain fields and will be accomplished by the park staff or the contractor as soon as the state permit notice-to-proceed is issued.
4. "Disturbance Free Zones" will be posted away from the construction areas where potential bird resting and nesting may occur, and will be conducted by park staff prior to commencement of construction.
5. Post and rope will be placed to delineate the beach access areas from each of the beach pull-off parking areas. This will be done by the general contractor when these pull-off parking areas are improved and opened for public use.

6. Additional compatible beach-quality sand will be placed in areas just seaward of the two beach use area sites to construct a continuous dune system approximately 500-feet in length and overlapping the proposed construction areas. This will form a “dune-like” feature that will discourage crawling of sea turtles into the construction areas. This will be performed by park staff or by the general contractor prior to May 1, 2006.
7. A Hurricane Ivan Dune Restoration Planting Project will be conducted during the months of April and May 2006 to enhance the beach dune community, thereby providing a benefit to both shorebirds and nesting sea turtle habitat. This will be done by landscape contractors and monitored by Division Staff along with the environmental engineering consultants.

Because of the reasons previously stated, and because FDEP has agreed to comply with USF&WS suggested mitigation measures, the project is not likely to adversely affect federal or state protected species. USF&WS has concurred that the project is not likely to adversely affect nesting sea turtles, non-breeding piping plovers, and designated critical habitat for the piping plover in their February 28, 2006 letter (Appendix C - Contact 4).

3.2.3.3 Restore to Pre-Disaster Locations with Elevated Facilities

The *Restore to Pre-disaster Conditions Alternative* is not likely to adversely affect threatened or endangered species, although it has a greater potential to impact nesting sea turtles than the *Preferred Alternative*. This alternative would result in the reconstruction of the facilities within the same footprint, though elevated, which is more seaward than the *Preferred Alternative*. Since this location is closer to the Gulf of Mexico, nesting sea turtles could be expected to visit the construction zone. Additionally, because of the more seaward location, a berm discouraging the crawling of sea turtles would not be practicable. Such a berm would interfere with beach use by the public.

The project would incorporate other mitigation measures, including daily monitoring for shorebirds and turtles. Any sea turtle nests that were encountered would be relocated. Tarps would be placed over sewage disposal drain fields, disturbance free zones would be established and beach access areas would be established. With these mitigation measures in place, the project is not likely to adversely affect protected species.

3.3 Hazardous and Special Waste Materials

In general hazardous materials⁹ are substances that are classified as either corrosive, ignitable, reactive, or toxic. The proposed project location is not located near any identified Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites included in the USEPA CERCLIS listing last updated as of 28 October 2005.

3.4 Socioeconomics

3.4.1 Zoning and Land Use

The St. George Island State Park area is not incorporated and, as such, US Census data specific to this area are not available. As a vacation destination, the population at any one time may consist of a

⁹ Those substances defined by Comprehensive Environmental Response Compensation and Liability Act (CERCLA), [42 USC 6901 et seq.], and the Resource Conservation Act, [42 USC 6901 et seq.], as amended.

majority of tourists and vacationers, rendering the value of numbers, and percentages less than helpful. Of more value is a concentration on land uses rather than permanent residents.

St. George Island State Park is inhabited year-round. It has visitor oriented beaches with parking and picnic shelters, it previously had restroom and bath house facilities; all of these amenities are oriented to day visitors. All the property in the immediate vicinity of the project is publicly owned. The mission of the FDEP State Park Service is to provide resource-based recreation while preserving, interpreting and restoring natural and cultural resources. Operations at St. George Island State Park fully support this mission. Latest data show over 200,000 visitors used the beach area, camping area and trails in the park in fiscal year 1999-2000. The management of this volume of public use on the shoreline areas of the park continues to be the greatest challenge in the FDEP State Park Service's management of the area.¹⁰ The St. George Island State Park "Detailed Park Map" (Appendix A – Exhibit 2) identifies the park amenities.

3.4.1.1 *No-Action Alternative*

Under this alternative, existing land use would be disrupted because there would be no restrooms or bath facilities to service the visitors. This could impact the number of visitors the St. George Island State Park receives each year and the ability of the State Park Service to fulfill their mission to the extent it has in the past. No impacts to zoning would occur, however.

3.4.1.2 *Preferred Alternative*

Under the *Preferred Alternative*, construction would take place in a location where this type of public facility has been since 1982. The construction of the facility would support current land use. No impacts to zoning would occur.

3.4.1.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

Under this alternative, construction would take place in a location where this type of public facility has been since 1982. The construction of the facility would support current land use. No impacts to zoning would occur.

3.4.2 *Aesthetics and Visual Resources*

St. George Island is a long and narrow island off the coast of Florida's Panhandle. The entire island lies within the 100-year floodplain, with waves, tides and storm surges easily intruding well past the beaches. This constant interaction with the water has resulted in a southern perimeter of white quartz sands, with dunes and beaches defending the interior and the mainland.

The St. George Island State Park is a major tourist destination for day trips to the beach. The St. George Island area is a popular area, considering the numbers of visitors present and their density. Located just across the bay from historic Apalachicola, Florida, St. George Island offers superior beach vacation accommodations. This twenty-nine mile stretch of land is no wider than a mile at its widest point, providing access to both the excellent fishing waters of Apalachicola Bay and the emerald green waters of the Gulf of Mexico. Strict building codes and low density zoning regulations have preserved the beauty of St. George Island. Wildlife abounds on the island, affording bird watching opportunities. Shell collectors enjoy miles of pristine white sand beaches with excellent shelling opportunities.

¹⁰ Op. cit., "Dr. Julian G. Bruce St. George Island State Park Unit Management Plan"; State of Florida Department of Environmental Protection, Division of Recreation and Parks, February 7, 2003

The beaches are preserved in their natural state, for the enjoyment of all, today and into the future. The landward edge of the beach area has been altered to handle the crowds, to serve and satisfy the tourists and to accommodate the statutory requirements. The aesthetic and visual resources of St. George Island State Park are significant. The white sand beaches and Gulf of Mexico provide for considerable aesthetics. Photographs of the specific locations within the Park where the restrooms and bath house facilities will be located can be seen in Collection 1 in Appendix A, Photographs.

3.4.2.1 *No-Action Alternative*

The *No-Action Alternative* would not impact visual resources.

3.4.2.2 *Preferred Alternative*

The *Preferred Alternative's* proposed one-story restroom and bath house shower facility structure would be approximately the same size as either of the previous buildings. The design for the structure is intended to provide a structure that blends into the type of structures typically found in this environment. The facility should be aesthetically acceptable.

Being located within the footprint of the pre-existing parking lot area, very little view of the beach will be lost. The mass of the structure at each facility will be essentially half that which existed before with two structures. The view from the proposed building would be notable, allowing the beach front vista to be seen. Overall, the aesthetics of the area will be enhanced over pre-existing conditions because of the reduced number of structures and improved aesthetic appeal of the new structure.

3.4.2.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The *Restore to Pre-disaster Conditions* would result in the installation of two structures at each facility. The facilities would be less aesthetically acceptable, being located at an elevation significantly higher than the adjacent pavilion buildings, yet within the footprint of the pre-existing structures. The views from the proposed buildings would be notable, allowing the beach front vista to be seen. On the other hand, the taller buildings would block more of the views from further landward perspectives. The aesthetics of the area would be less than the *Preferred Alternative*, however because of the greater number of structures and the increased height of them.

3.4.3 *Noise*

Noise, defined for the purposes of this discussion as undesirable sound, is federally regulated by the Noise Control Act (NCA) enacted in 1972 (*PL 92-574*). Although the NCA gives the USEPA authority to prepare guidelines for acceptable ambient noise levels, it only charges federal agencies that operate noise-producing facilities or equipment to implement noise standards. The USEPA guidelines, and those of many federal agencies, state that outdoor sound level in excess of 55 dBA (decibels, "A-weighted" noise scale) are "normally unacceptable" for noise-sensitive residential land uses such as residences, schools and hospitals, especially when there is identified outside human activity. The range of human hearing is from approximately 20 dBA (the threshold of hearing) to 120 dBA (the threshold of pain). Under most conditions, persons with normal hearing would require a change of 5 dBA, either more or less, before a noticeable change in the noise environment would occur. A change of 3 dBA, either more or less, would be at the lower end of barely perceptible change. The affects of noise on people usually result in general annoyance, disturbance with sleep, and interference with vocal communication.

3.4.3.1 *No-Action Alternative*

The *No-Action Alternative* would not generate any construction or operating noise. This alternative would not result in any changes in the existing or future ambient noise of the recreational beach areas.

3.4.3.2 *Preferred Alternative*

The existing ambient noise levels in the vicinity of the location of the *Preferred Alternative* are consistent with levels experienced throughout the public use beach areas of St. George Island State Park. Occupied and operating public restrooms and bath house facilities will not normally generate or directly contribute to the ambient noise levels in the area. The facility is situated in the immediate vicinity of park access road along the beach's two large parking lots. These features, the access road and parking lots, are the ambient noise generators of the area. Short-term, sporadic noise generation may be associated with the necessary and critical function of the emergency, first-aid and public safety services that might be drawn to the facilities for the protection of human life, however. This emergency services response noise would be the result of sirens being activated on responding vehicles.

Construction noise is expected to be generated from the site as a result of pile driving, machinery and truck traffic necessary for the supply of materials and building erection. The construction noise would be greatest during the pile-driving phase during the first few weeks of the construction schedule. All of the construction noises would be of short duration and would not have a sustained affect on the surrounding recreational users of the beach. Construction equipment, delivery and storage would be located in already disturbed areas (the parking lots and service drive/areas) away from occupied beach activities. Because of the short durations of noise generated, and the fact that the beach area will remain closed to the public until construction is substantially completed, there would be no significant adverse noise impacts resulting from the alternative.

3.4.3.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The *Restore to Pre-disaster Conditions Alternative* would have the same noise impacts as the Preferred Alternative. The access road and parking lots would be the ambient noise generators of the area. Short term, sporadic noise would occur from emergency service response. Short term noise impacts would occur during the construction phase. Because of the short term duration of the construction noise, no significant adverse noise impacts would result from this alternative.

3.4.4 *Public Services and Utilities*

The concept of Public Service, when discussed with potential projects, generally refers to police, fire, ambulance, transit, etc. A roadway project can facilitate access. A commercial building or shopping center can cause congestion on the streets and require more public services. This project is quite different; it is the public service of providing basic health and sanitation facilities to the general public using the public beaches of St. George Island State Park.

The public services and utilities currently existing at the State Park are:

- There are only a few sanitary sewers on the island, and only associated with higher end condominium developments. There are none within the St. George Island State Park. All sewerage is handled by septic fields or aerobic systems.

- Electrical power is supplied by Florida Power out of their Apalachicola facilities.
- Gas service is generally propane, with individual tanks at each user location. There are none at either of the two proposed construction sites.
- Potable water is supplied to the Park (and to the rest of the island) by Water Management Services, St. George Island. Their water comes from four wells on the mainland and is pumped in pipes attached to the County Highway 300 bridge over Apalachicola Sound.
- Emergency services are supplied by the St. George Island Volunteer Fire Department and the Franklin County Sheriff, St. George Island Sub-station.

The service that was provided by the pre-disaster West Beach Use Area and East Beach Use Area restrooms and bath house facilities is not adequately provided for any longer. The proposed project intends to combine restrooms and bath house facilities services into a single facility, accessible to the beach, and accessible to landward support from the paved parking lots and connected access road transportation.

3.4.4.1 *No-Action Alternative*

If the *No-Build Alternative* is selected, the public services will be poorly provided for (portable, chemical toilets) or not provided for at all. The *No-Action Alternative* would maintain the current negative impact on the visiting public and the St. George Island State Park community.

3.4.4.2 *Preferred Alternative*

Under the *Preferred Alternative*, public services would be restored to a level that was present before Hurricane Dennis. The implementation of the *Preferred Alternative* would have benefits to the St. George Island State Park and local community.

3.4.4.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

Under the *Restore to Pre-Disaster Locations with Elevated Facilities Alternative*, public services would be restored to a level that was present before Hurricane Dennis. The implementation of this alternative would have benefits to the St. George Island State Park and local community.

3.4.5 *Traffic and Circulation, Volume, Parking, and Access*

The park is located approximately 76 miles southwest of Tallahassee on County Highway 300, on St. George Island, ten miles southeast of Eastpoint. Traffic onto St. George Island must use US 98/319 to the municipality of Eastpoint, and then the causeway carrying County Highway 300 across St. George Sound from Eastpoint to the island. County Highway 300 then heads to the northeast end of the island, and the eight-mile State Park.

Privately owned residential and commercial properties are located south of County Highway 300, including most tourist related industries such as homes and condominiums for rent. Similar developments occur between County Highway 300 and the State Park. Once within the State Park, County Highway 300 is the only linear roadway; it ends at the East Beach Use Area (see Appendix A – Exhibit 2 and Appendix A, Photographs – first photo in Collection 1).

The bridge leading to and from the peninsula and Eastpoint is a two-lane facility. During peak travel periods, the single lane of traffic could get congested and traffic speeds would be reduced. Local access is provided along the island via private automobiles and bicycles.

At each of the Beach Use Areas, a large paved parking lot is present to accommodate day visitors to the beaches and off shore waters.

3.4.5.1 *No-Action Alternative*

No impacts to traffic or public transportation are anticipated under the *No-Action Alternative*. It is possible that the number of visitors to the Park would decline if the restroom and bathing facilities were not replaced. Future use of the Park cannot be predicted with certainty, but usage changes are not anticipated to cause significant impacts to traffic.

3.4.5.2 *Preferred Alternative*

The *Preferred Alternative* would not result in long term impacts to traffic or public transportation under the proposed action. The buildings are support facilities rather than attractions in themselves. The replacement of the demolished bathhouses will permit the State Park to reopen to visitors, the purpose for which they were dedicated. It will draw no additional traffic other than those already coming to the beaches. Traffic to and from the facility is on foot.

Short term impacts during construction should cause no disturbance to the access roads as the park is closed due to lack of public facilities.

3.4.5.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

Impacts from the *Restore to Pre-disaster Conditions* would be the same as for the *Preferred Alternative*. The facilities would not result in increases in traffic. No short term impacts during construction would occur because the park is closed due to lack of facilities.

3.4.6 *Environmental Justice (Executive Order 12898)*¹¹

On February 11, 1994, President Clinton signed Executive Order 12898 (EO 12898), entitled, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”. This EO directs federal agencies, “to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States” Its goals are to achieve environmental justice, fostering non-discrimination in federal programs that substantially affect human health or the environment, and to give minority or low-income communities greater opportunities for public participation in and access to public information on matters relating to human health and the environment.

Approximately 2,334 persons reside in the community of Apalachicola and 2,158 persons reside in the community of Eastpoint (CENSUS 2000), on the mainland of Florida. This is in dramatic contrast to the yearly tourist and recreational population of approximately one-million persons passing through the Apalachicola, Eastpoint and St. George Island area, with a significant proportion using or visiting the beach areas of St George Island State Park. In general, for the Apalachicola area:

¹¹ E.O 12898; signed 11 February 1994; 59 FR 7629, 16 February 1994; amends E.O 12250, 2 November 1980; amended by: E.O 12948, 30 January 1995.

- Median household income is below state average,
- Unemployed percentage is below state average,
- Black race population percentage is significantly above state average,
- Hispanic race population percentage is significantly below state average,
- Foreign-born population percentage is significantly below state average,
- Institutionalized population percentage is above state average, and.
- Percentage of population with a bachelor's degree or higher is below state average.

In general, for the Eastpoint area:

- Median household income is below state average,
- Unemployed percentage is below state average,
- Black race population percentage is significantly below state average,
- Hispanic race population percentage is significantly below state average,
- Median age is above state average,
- Foreign-born population percentage is significantly below state average,
- House age is significantly below state average,
- Percentage of population with a bachelor's degree or higher is significantly below state average, and
- Population density is below state average for cities.

In compliance with FEMA's policy implementing EO 12898, Environmental Justice, the socioeconomic conditions and potential effects related to the *No-Action Alternative*, the *Preferred Alternative* and the *Restore to Pre-Disaster Conditions Alternative* have been reviewed.

3.4.6.1 *No-Action Alternative*

The *No-Action Alternative* course of action will affect all persons using the public beach areas of St. George Island State Park because there would be a continuation of the lack of public restrooms that was previously provided for. *The No-Action Alternative* would not have a disproportionately high impact on the minority or low-income populations of the communities that use the public beaches.

3.4.6.2 *Preferred Alternative*

The construction of the *Preferred Alternative* will affect all the users of the public beaches equally. There will be no disproportionately high or adverse impacts on minority or low-income populations of the communities that use the public beaches. Public restrooms and bath

facilities would be available to all populations of the communities that use the public beaches. The *Preferred Alternative* would benefit the entire population that uses the public beaches because of the restrooms and bath house facilities equally available to all.

3.4.6.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The *Restore to Pre-disaster Conditions with Elevated Facilities Alternative* would, similar to the *Preferred Alternative*, have no disproportionately high or adverse impacts to minority or low-income populations. This alternative would benefit the entire population that uses the public beaches.

3.4.7 *Public Health and Safety (including Executive Order 13045)*

The purpose and need of this project is to address the loss of the public facilities that housed the only permanent, publicly accessible restrooms and showers on St. George Island State Park.

On 21 April 1997, President Clinton signed Executive Order 13045 (EO 13045)¹² entitled “Protection of Children from Environmental Health Risks and Safety Risks”. EO 13045 directs federal agencies to “make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children and to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” EO 13045 does apply to the project because the alternatives affect the safety and security children.

When Hurricane Dennis damaged the existing facilities, the damaged structures were a public safety hazard. Authorities, after assessing the damages and opportunities, elected to demolish the shells of the restroom and shower facilities and clean the area for the immediate protection of all concerned.

No hazardous materials or special wastes exist at the site. Seismic preparedness is not an issue in this geological area (see Section 3.1.1). Periodic flooding is an issue, as discussed in Section 3.1.3. Local codes require a three-foot freeboard above the 100-year storm elevation, and the proposed facility complies with that code.

The premier health issues for this project are sanitation and the preservation of the clean beachfront. Without the restrooms and bath houses, these services are not being provided for to a level that meets the health and safety needs of the beach user. Temporary use of portable chemical toilets may be implemented, but they can be tipped over in storms or as pranks, resulting in localized contamination. The lack of showers for personal hygiene would not be addressed.

3.4.7.1 *No-Action Alternative*

The *No-Action Alternative* results in adverse impacts to the general public and children because of the lack of permanent sanitation facilities. The *No-Action Alternative* would not result in construction impacts that could adversely affect the population in general. There would therefore be no potential risks to the safety of construction personnel during construction activities.

3.4.7.2 *Preferred Alternative*

The implementation of the *Preferred Alternative* will have beneficial impacts on public health and safety by providing permanent sanitation facilities.

¹² EO 13045; signed 21 April 1997; 62 FR 19885, 23 April 1997; revoked E.O 12606, 2 September 1987; amended by: EO 13229, 9 October 2001; EO 13296, 18 April 2003.

During construction of the facility, the *Preferred Alternative* could present safety risks to those performing the construction activities. To minimize risks to safety and human health, all construction activities will be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions; additionally, all activities will be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Act (OSHA) regulations. The construction site is located within a portion of the Park that is currently closed to the public. Potential safety impacts to children during construction would therefore not occur, and EO 13045 would not apply because of construction impacts.

3.4.7.3 *Restore to Pre-Disaster Locations with Elevated Facilities*

The potential safety impacts of the *Restore to Pre-Disaster Locations with Elevated Facilities* are the same as that for the *Preferred Alternative*. The overall project will provide health benefits with the restoration of restrooms and bathing facilities. There would be no impacts during construction because this portion of the Park is closed and will be closed during construction.

3.5 Cultural Resources

As one of the considerations of NEPA, impacts to historic properties are to be considered and protected under Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by *36 CFR Part 800*. Additionally, Executive Order # 13175 - Consultation and Coordination With Indian Tribal Governments (EO 13175) must be considered with regards to cultural resources. EO 13175 was issued in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes. These and other related statutes require Federal agencies to look at the potential consequences of their decisions, and to incorporate into their actions measures to avoid, minimize or mitigate any adverse impacts to historic or cultural resources resulting from such actions, to the maximum extent possible or practicable.

FEMA must determine, in consultation with the appropriate State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officer (THPO), what effect, if any, their actions will have on historic properties and determine if the project will have an adverse effect on these properties. FEMA must consult with the appropriate agencies on ways to avoid, minimize, or mitigate the adverse effect. To comply with and expedite the review process under Section 106, the Florida SHPO, State of Florida Department of Community Affairs (FDCA), Division of Emergency Management (DEM) and FEMA have entered into a Programmatic Agreement (PA) for the administration of FEMA programs in Florida. In accordance with this agreement, when FEMA is determined to be the lead agency, FEMA will coordinate the Section 106 review activities with all Federal agencies and Tribes that participate.

Enabling Legislation for the cultural and historic review in this EA includes, but is not limited to the following:

- National Historic Preservation Act of 1966, as amended, Historic and Cultural Resources: Section 106 [*16 USC 470(f) et seq.*];
- Archeological Resources Protection Act of 1977 [*16 USC 470(aa)-11*];

- Archeological and Historic Preservation Act [*16 USC 469-469(c)*];
- Native American Grave Protection and Repatriation Act (NAGPRA) [*25 USC 3001-3013*]; and,
- EO 13175 - Consultation and Coordination With Indian Tribal Governments

3.5.1 Historic Architecture

In accordance with the PA, a FEMA historic specialist has reviewed this project. The National Park Service's National Register of Historic Places database, Florida Master Site File, and the FEMA-EST databases were consulted and no historic buildings or structures are located or were identified within the Area of Potential Effect (APE) or immediately adjacent areas.¹³ Based on this information, FEMA has determined that this undertaking will have no adverse effects on historic buildings or structures. The Florida SHPO has concurred with these findings in a letter dated February 2, 2006 with a finding of no effect on historic properties.¹⁴

3.5.2 Archaeological Resources

FEMA conducted a field inspection of the St. George Island activity areas at the West and East Beach Use Areas. No areas of prehistoric or historical archaeological interest were observed. A review of the Florida Master Site File, and the FEMA-EST database indicated that no archaeological sites are located within the APE; however three archaeological sites were identified in the immediately adjacent areas (Appendix C – Contact No. 1, Page 4). These sites are:

- Site FR 840, Rattlesnake Gove, a prehistoric shell midden is located approximately 2.17 miles southeast of the West Beach Use Area.
- Site FR 845, Midden, this is a low density artifact scatter located approximately 2.0 miles southeast of the West Beach Use Area.
- Site FR 846, Rattlesnake Cove #2, unspecified by recorder, is located approximately 1.9 miles southeast of the West Beach Use Area.

FEMA has reviewed the existing data and based on available information has determined that the proposed undertaking will not adversely affect any known archaeological resources within the APE or adjacent areas. The Florida SHPO has concurred with these findings in a letter dated February 2, 2006 with a finding of no effect on historic properties.¹⁵ To ensure that during the construction process any items of archaeological, historical or architectural interest are protected, the FDEP, Division of Recreation and Parks and its contractors shall monitor excavation activities. In the event any items of interest are discovered, FDEP should make all reasonable efforts to protect the items and to avoid further harm to the items until the significance of the discovery can be determined. The FDEP shall notify FEMA and the SHPO immediately.

¹³ The FEMA-EST database was established as a disaster recovery response tool. The database is intended to provide decision making support to emergency response personnel. The FEMA-EST tools and reports provide information and analysis and help determine the potential impact on environmental and historic resources. - The FEMA-EST is a customized version of the FL DOT's Efficient Transportation Decision Making (ETDM) Environmental Screening Tool.

¹⁴ Appendix E, Letter from FL. SHPO to FL Department of Environmental Protection (DHR file No. 2006-599)

¹⁵ Appendix E, Letter from FL. SHPO to FL Department of Environmental Protection (DHR file No. 2006-599)

3.5.1 Indian Coordination and Religious Sites

Under the Section 106 review process, agency officials are required to consult with any federally recognized Indian tribe that attaches religious or cultural significance to historic properties that may be affected by an undertaking, and invite them to become consulting parties. Consultation with Indian tribes is a unique legal relationship and is recognized as a government to government relationship. Requests for evaluation of the presence or absence of known archaeological or Indian Religious sites within the proposed project areas were submitted to both of the federally recognized tribal groups in Florida. The two federally recognized Florida tribes are the Seminole Tribe of Florida¹⁶ and the Miccosukee Tribe of Indians of Florida.¹⁷ Ongoing coordination with the two federally recognized Native American Indian Tribes is included in Appendix – C, Contact 1 (Miccosukee Indian Tribe of Florida) and Contact 2 (Seminole Tribe of Florida). The Miccosukee Tribe of Indians of Florida has expressed their desire to be a consulting party on this project (letter dated March 7, 2006). Consultation is ongoing.

Affected Environment and Consequences - Table 1 Impact Summary

The following table summarizes the summary of the issues and anticipated impacts for the replacement of the St George Island State Park restrooms and bath house shower facility structures at West Beach Use Area and East Beach Use Area from the various alternatives.

AFFECTED ENVIRONMENT and CONSEQUENCES				
Table 1- Impact Summary				
Affected Environment Issue Areas	Location in Text (Section)	Summary of Impacts Alternatives		
		No-Action	Replace Reduced Facilities at Alternate Location Alternative (Preferred)	Restore to Pre-Disaster Locations with Elevated Facilities
Physical Environment	3.1			
<i>Topography and Soils, Seismicity & Prime Farmland (E.O. 12699)</i>	3.1.1	None	None	Impacts due to interference with accretion of primary dune which is developing.
<i>Water Resources and Water Quality: Surface Water & Groundwater</i>	3.1.2	None	Short term impacts to surface waters may occur as a result of construction activities. Appropriate erosion control and BMPs would be utilized to minimize any impacts. Potential for stormwater pollution impacts from the septic system and drain fields exist, but impacts are not probable.	Short term impacts to surface waters may occur as a result of construction activities. Appropriate erosion control and BMPs would be utilized to minimize any impacts. Potential for stormwater pollution impacts from the septic system and drain fields exist, but impacts are not probable.

¹⁶ Seminole Tribe of Florida; <http://www.seminoletribe.com/>

¹⁷ Miccosukee Tribe of Indians of Florida; <http://www.miccosukeeresort.com/tribe.html>

AFFECTED ENVIRONMENT and CONSEQUENCES

Table 1- Impact Summary

Affected Environment Issue Areas	Location in Text (Section)	Summary of Impacts Alternatives		
		<i>No-Action</i>	<i>Replace Reduced Facilities at Alternate Location Alternative (Preferred)</i>	<i>Restore to Pre-Disaster Locations with Elevated Facilities</i>
<i>Floodplain Management (E.O. 11988)</i>	3.1.3	Restores minimal amount of floodplain storage; removes potential stormwater pollution source from septic system and drain fields.	Impacts from this alternative result in minor amounts of fill within the floodplain and the resulting negligible loss of stormwater storage. This fill amount would be insignificant compared to the amount of storage available for St. George Island and the Gulf of Mexico. Short term impacts to the floodplain may occur as a result of construction activities. Appropriate erosion control and BMPs would be utilized to minimize any impacts. Potential for impacts to stormwater pollution from the septic system and drain fields exist, but are not probable.	Impacts from this alternative result in minor amounts of fill within the floodplain and the resulting negligible loss of stormwater storage. This fill amount would be insignificant compared to the amount of storage available for St. George Island and the Gulf of Mexico. Short term impacts to the floodplain may occur as a result of construction activities. Appropriate erosion control and BMPs would be utilized to minimize any impacts. Potential for impacts to stormwater pollution from the septic system and drain fields exist, but are not probable.
<i>Air Quality</i>	3.1.4	<i>None</i>	This alternative has the potential to have short-term air quality impacts due to construction equipment. The air quality impacts would be short-term, occurring only while construction work on the restrooms and bath house shower facility structures is in progress. Dust and airborne dirt generated by construction activities shall be controlled through general dust control BMPs or a specific dust control plan could be developed if warranted. No permanent air quality impacts are expected from the operation of the facility.	This alternative has the potential to have short-term air quality impacts due to construction equipment. The air quality impacts would be short-term, occurring only while construction work on the restrooms and bath house shower facility structures is in progress. Dust and airborne dirt generated by construction activities shall be controlled through general dust control BMPs or a specific dust control plan could be developed if warranted. No permanent air quality impacts are expected from the operation of the facility.
<i>Coastal Zone Management</i>	3.1.5	<i>None</i>	<i>None</i> - Permit number FR-805 has already been issued by the FDEP.	Unknown - Permit needed for compliance with the CZMA; none has been issued or reviewed.
<i>Coastal Barriers Resources</i>	3.1.6	<i>None</i>	<i>None</i>	<i>None</i>
Biological Environment	3.2			

AFFECTED ENVIRONMENT and CONSEQUENCES

Table 1- Impact Summary

Affected Environment Issue Areas	Location in Text (Section)	Summary of Impacts Alternatives		
		<i>No-Action</i>	<i>Replace Reduced Facilities at Alternate Location Alternative (Preferred)</i>	<i>Restore to Pre-Disaster Locations with Elevated Facilities</i>
<i>Terrestrial and Aquatic Environment</i>	3.2.1	None	Since the <i>Replace Reduced Facilities at Alternate Location</i> beach sites are disturbed from the presence and demolition of the previous restrooms and bath house shower facility structures, no impacts to the terrestrial or aquatic environment are anticipated at the replacement structure locations. New septic fields would be constructed in and around one of the two previously disturbed areas resulting from the demolition and removal of the original septic fields at each beach site location.	Since the <i>Restore to Pre-Disaster Locations with Elevated Facilities</i> beach sites are disturbed from the presence and demolition of the previous restrooms and bath house shower facility structures, no impacts to the terrestrial or aquatic environment are anticipated at the replacement structure locations. New septic fields would be constructed in and around two of the two previously disturbed areas resulting from the demolition and removal of the original septic fields at each beach site location.
<i>Wetlands (E.O. 11990)</i>	3.2.2	None	None	None
<i>Threatened and Endangered Species</i>	3.2.3	None	Would install a “dune-like” feature and extend the in progress natural reforming dune system that has been developing since Hurricane Dennis. The continuous dune system would discourage crawling turtles from entering construction areas. Not Likely to Adversely Affect (NLAA) regarding nesting sea turtles, non-breeding piping plover, designated critical habitat for the piping plover and bald eagle. The FDEP would incorporate site specific agreed upon mitigation measures.	The physical placement of facilities would disrupt or eliminate the in progress natural reforming dune system that has been developing since Hurricane Dennis. Construction areas open to crawling sea turtles. Not Likely to Adversely Affect (NLAA) regarding nesting sea turtles, non-breeding piping plover, designated critical habitat for the piping plover and bald eagle. The FDEP would incorporate site specific agreed upon mitigation measures.
Hazardous and Special Waste Materials	3.3	None	None	None
Socio-Economics	3.4			

AFFECTED ENVIRONMENT and CONSEQUENCES

Table 1- Impact Summary

Affected Environment Issue Areas	Location in Text (Section)	Summary of Impacts Alternatives		
		<i>No-Action</i>	<i>Replace Reduced Facilities at Alternate Location Alternative (Preferred)</i>	<i>Restore to Pre-Disaster Locations with Elevated Facilities</i>
<i>Zoning and Land Use</i>	3.4.1	Land use changes may occur due to a change in the number of visitors to the Park.	None	None
<i>Aesthetics and Visual Resources</i>	3.4.2	None	The view of the structure from the beach would be more pleasing on one hand over that which pre-existed, due to the reduction in the number of structures and relocation further away from the beach water edge into the paved parking lot area. Overall, the aesthetics of the area would be enhanced over pre-existing conditions.	The facilities would be less aesthetically acceptable than the Preferred Alternative, being located at an elevation significantly higher than the adjacent pavilion buildings. The taller buildings would block more of the views from further landward perspectives. The quality of aesthetics of the area would be less because of the greater number of structures and the increased height of them.
<i>Noise</i>	3.4.3	None.	Construction noise is expected to be generated from the site as a result of pile driving, machinery and truck traffic necessary for building erection and supply of materials. All of the construction noises would be of short duration and would not have a sustained affect on the surrounding adjacent areas of St. George Island State Park or the recreational users of West Beach Use Area and East Beach Use Area. No significant adverse noise impacts would result from this alternative.	Construction noise is expected to be generated from the site as a result of pile driving, machinery and truck traffic necessary for building erection and supply of materials. All of the construction noises would be of short duration and would not have a sustained affect on the surrounding adjacent areas of St. George Island State Park or the recreational users of West Beach Use Area and East Beach Use Area. No significant adverse noise impacts would result from this alternative.
<i>Public Service</i>	3.4.4	Impacts public services at the Park by not providing for restroom or bathing facilities.	Consolidating public health services in one convenient and central location at each public beach area with ADA compliance features meets the need for public service of the St. George Island State Park patrons.	Consolidating public health services in one convenient and central location at each public beach area with ADA compliance features meets the need for public service of the St. George Island State Park patrons.
<i>Traffic and Circulation, Volume, Parking and Access</i>	3.4.5	None	The Preferred Alternative would not result in long term impacts to traffic or public transportation under the proposed action.	Impacts from the Restore to Pre-disaster Conditions would be the same as for the Preferred Alternative.
<i>Environmental Justice (E.O. 12898)</i>	3.4.6	None	None	None

AFFECTED ENVIRONMENT and CONSEQUENCES

Table 1- Impact Summary

Affected Environment Issue Areas	Location in Text (Section)	Summary of Impacts Alternatives		
		<i>No-Action</i>	<i>Replace Reduced Facilities at Alternate Location Alternative (Preferred)</i>	<i>Restore to Pre-Disaster Locations with Elevated Facilities</i>
<i>Public Health and Safety (E.O. 13045)</i>	3.4.7	Impacts public health and safety by failing to provide adequate restrooms and bath house shower facilities for the public beach areas.	This alternative would provide beneficial public health and safety features to the St. George Island State Park visitors by providing needed bathroom and bathing facilities. There would be no impacts during construction because this portion of the Park is closed and would be closed during construction.	This alternative would provide beneficial public health and safety features to the St. George Island State Park visitors by providing needed bathroom and bathing facilities. There would be no impacts during construction because this portion of the Park is closed and would be closed during construction.
Cultural Resources	3.5			
<i>Historic Architecture</i>	3.5.1	None	None	None
<i>Archaeological Resources</i>	3.5.2	None	None	None
<i>Indian Coordination and Religious Sites</i>	3.5.3	None	None	None

Section 4 -Public Participation

Disaster-wide initial public notice was published state wide, with publication in the Pensacola News Journal on September 21, 2005. No comments were received from that notice. Final public notice will be published in the Apalachicola Times on 06/29/2006. The public will be advised on the project and the fact that a Draft EA has been developed. The public will be advised on how to obtain copies of the EA and invited to comment.

The FDEP CCCL permit requires that St. George Island State Park provide notice of the FDEP's action to adjacent property owners and interested parties in Franklin County. This was done by FDEP early in the CCCL permitting process. A letter was sent out January 17, 2006 requesting public comment. No comments were received.

The Draft EA will be made available to interested parties through publication on FEMA's website (<http://www.fema.gov/plan/ehp/envdocuments/index.shtm>) and by distribution within the adjacent community. The Draft EA will be distributed to interested parties and the following locations.

Franklin County Library
Apalachicola Program Center
148 8th St.
Apalachicola, FL 32329

Franklin County Library
Eastpoint Branch
29 Island Dr.
PO Box 722
Eastpoint, FL 32328

Apalachicola Municipal Library
72 6th Street
Apalachicola, FL 32320

St. George Island State Park
Park Headquarters
1900 E. Gulf Beach Dr.
St. George Island, FL

The public will be invited to comment on the proposed project.

Section 5 -Mitigation Measures and Permits

5.1 Mitigation Measures

In accordance with the special conditions attached to the CCCL permit (see Appendix E, Item 1) all excavated material shall be maintained seaward of the CCCL. It must remain on-site and be distributed at locations identified by the engineer seaward of the CCCL.

Appropriate erosion control and BMPs will be utilized to minimize any impacts resulting from parking lot runoff, erosion and/or sedimentation during construction.

Dust and airborne dirt generated by construction activities shall be controlled through general dust control BMPs or a specific dust control plan could be developed if warranted. The contractor and St. George Island State Park personnel will meet to review the nature and extent of potential and known dust-generating activities and will cooperatively develop specific types of control techniques appropriate to the project and local situations. Some of the techniques that may warrant consideration include measures such as minimizing the tracking-out of soil onto nearby publicly-traveled roads, reducing speed on paved roads or unpaved areas, covering (tarpaulin-covered) haul vehicles, and applying water to exposed surfaces, particularly those on which construction vehicles travel. Any burning of materials, vegetation or debris would be undertaken according to relevant local laws and ordinances, including, but not limited to, the current St. George Island State Park and FDEP ordinances or regulations of the FDEP. Appropriate public traffic control plans may also serve to limit localized concentrations of airborne emissions during construction.

If project activities include the stockpiling of sands on-site, the project applicant will be required at the direction of the engineer to cover these sands to help prevent fugitive dust and erosion. Fencing and straw/hay bales should be installed to reduce loss. Following construction activities, exposed, compacted sands would be graded and restored.

If an accidental spill occurs during construction, the contractor will be responsible for minimizing the amount spilled and any clean-up required. Federal and state regulations regarding the reporting and clean-up of accidental spills will be complied with.

To avoid impacts to threatened or endangered species, FDEP will comply with mitigation measures suggested by USFWS. These measures include:

1. Monitoring of shorebird presence and activities by Park staff from January 27, 2006 until project construction is complete.
2. Daily sea turtle nesting surveys, beginning on May 1, 2006 by park staff, to continue until September 1st.
3. Tarps or plastic material will be placed over the proposed sites for the two sewage disposal drain fields and will be accomplished by the park staff or the contractor as soon as the state permit notice-to-proceed is issued.
4. "Disturbance Free Zones" will be posted away from the construction areas where potential bird resting and nesting may occur, and will be conducted by park staff prior to commencement of construction.

5. Post and rope will be placed to delineate the beach access areas from each of the beach pull-off parking areas. This will be done by the general contractor when these pull-off parking areas are improved and opened for public use.
6. Additional compatible beach-quality sand will be placed in areas just seaward of the two beach use area sites to construct a continuous dune system approximately 500 feet in length and overlapping the proposed construction areas. This will form a “dune-like” feature that will discourage crawling of sea turtles into the construction areas. This will be performed by park staff or by the general contractor prior to May 1, 2006.
7. A Hurricane Ivan Dune Restoration Planting Project will be conducted during the months of April and May 2006 to enhance the beach dune community, thereby providing a benefit to both shorebirds and nesting sea turtle habitat. This will be done by landscape contractors and monitored by Division Staff along with the environmental engineering consultants.

To minimize risks to safety and human health, all construction activities will be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions; additionally, all activities will be conducted in a safe manner in accordance with the standards specified in Occupational Safety and Health Act (OSHA) regulations.

To ensure that during the construction process any items of archaeological, historical or architectural interest are protected the FDEP, Division of Recreation and Parks and its contractors shall monitor excavation activities. In the event any items of interest are discovered, FDEP should make all reasonable efforts to protect the items and to avoid further harm to the items until the significance of the discovery can be determined. The FDEP shall notify FEMA and the FL SHPO immediately.

5.2 Permits

The following permit issues have been evaluated for need and, where required, have been obtained by the FDEP, Division of Recreation and Parks for the implementation of the *Preferred Alternative*. Those that have been obtained are noted below and copies included in Appendix F.

Section 404 Permit

A U.S. Army Corps of Engineers Section 404 permit is not required. There are no wetlands located within the project vicinity, nor are there Waters of the U.S. involved in the project.

NPDES Permit

A National Pollutant Discharge Elimination System (NPDES) construction permit is not required. Less than one acre of ground disturbance will occur.

Florida Department of Environmental Protection (FDEP) CCCL Permit

A FDEP CCCL permit is required. The St. George Island State Park has already applied for and received. This permit (permit number FR-805, dated February 14, 2006. The Permit FR-805 is provided as Item 1 in Appendix F. Compliance with all permit conditions is required as a condition of FEMA’s funding of this project. Compliance with permit conditions will minimize environmental impacts. See Item 1, Appendix E for the full permit and conditions.

Building Permit – Franklin County, FL

Building Permit No: 18865; dated February 14, 2006 has been issued by Franklin County, Florida from the Franklin County Inspection Department for the repair of the access road and replacement of two bathhouse facilities. See Item 3, Appendix F for the full permit and conditions.

Florida Department of Health - Septic Permits

The State of Florida Department of Health Onsite Sewage Treatment and Disposal System Construction Permit; CENTRAX #: 19-S1-02691, OSTDSNBR: 05-0412-N for a new system has been secured. Dated January 01, 2006, a copy of this permit can be found as Item 3, Appendix F and can be referenced for the full permit and conditions.

Florida Department of Environmental Protection (FDEP) – Stormwater Discharge Permit

General Permit 19-0232602-002-RG, dated January 6, 2006 has been secured for St. George Island State Park Hurricane Dennis Repair Stormwater Discharge Franklin County. See Item 4, Appendix F for the full general permit and conditions.

Section 6 - Consultations , References and Credits

6.1 Consultations

Coordination has occurred with various resource and regulatory agencies. In addition, the following agencies and organizations were sent the Draft EA for their comments.

Federal Emergency Management Agency Mr. Richard Myers Regional Environmental Officer 100 Sunport Lane Orlando, FL 32809 (407) 858-2705	Federal Emergency Management Agency Joseph Hudick Environmental Liaison Officer 100 Sunport Lane Orlando, FL 32809 (407) 850-7550
US Fish & Wildlife Service Gail Carmody, Project Leader Panama City Field Office 1601 Balboa Avenue Panama City, FL 32405-3721 (850) 769-0552	Florida Fish and Wildlife Conservation Commission Farris Bryant Building c/o Office of the Executive Director 620 South Meridian Street Tallahassee, FL 32399-1600 (850) 487-3796
Dale Quick Florida Dept. of Environmental Protection Senior Management Analyst Parks Department - Design & Construction 3540 Thomasville Road Tallahassee, FL 32309 (850) 488-5372	Kevin Jones Florida Dept. of Environmental Protection Park Manager St. George Island State Park 1900 E. Gulf Beach Drive St. George Island, FL 32328 (850) 932-5956
Jim Brewer Deputy Public Assistance Officer State of Florida, SERT 33 Brent Lane Pensacola, FL 32503 (540) 742.4903	John Bente, Chief Biologist – District One Florida Dept. of Environmental Protection Florida Park Service 4620 State Park Lane Panama City, FL 32408 (850) 233-5110
Rich Trnka Seminole Tribe of Florida Assistant Historic Preservation Officer Ah-Tah-Thi-Ki Museum HC 61 Box 21 - A Clewiston, FL 33440 (863) 902-1113	Steve Terry NAGARA & Section 106 Representative Miccosukee Tribe of Indians of Florida P.O. Box 440021 Tamiami Station Miami, FL 33144 (305) 223-8380
Mr. Mitchell Cypress, Chairman Seminole Tribe of Florida 6300 Stirling Road Hollywood, FL 33024	Mr. Billy Cypress, Chairman Miccosukee Tribe of Indians of Florida Tamiami Station, P.O. Box 440021 Miami, FL 33144
Ms. Nita Molsbee Customer Service Representative Water Management Services St. George Island, FL (850) 927-2648	Mr. Charles Saverling FDEP, Bureau of Design & Construction 3540 Thomasville Road Tallahassee, FL 32309 (850) 488-5372

6.2 References

- Comprehensive Environmental Response Compensation and Liability Act (CERCLA), [42 *USC 6901 et seq.*], and the Resource Conservation act, [42 *USC 6901 et seq.*], as amended
- Designated Sole-Source Aquifers in USEPA Region 4; <http://www.epa.gov/safewater/swp/ssa/reg4.html>
- Earthquake History of Florida; http://neic.usgs.gov/neis/states/florida/florida_history.html
- EO 12898; signed 11 February 1994; 59 FR 7629, 16 February 1994; amends EO 12250, 2 November 1980; amended by: E.O 12948, 30 January 1995.
- EO 13045; signed 21 April 1997; [62 *FR 19885*], 23 April 1997; revoked EO 12606, 2 September 1987; amended by: EO 13229, 9 October 2001; EO 13296, 18 April 2003
- Ewing, T.E., and Lopez, R.F., 1991, #2032, Principal structural features, Gulf of Mexico basin, in Salvador, A., ed., The Gulf of Mexico basin: Boulder, Colorado, Geological Society of America, The Geology of North America, v. J, plate 2, scale 1:2,500,000
- FEMA regulations for NEPA compliance [44 *CFR Part 10*]
- Florida Statutes Chapter 373, Part IV, <http://www.dca.state.fl.us/fdcp/dcp/Coastal/index.cfm>
- Gulf-margin normal faults, Alabama and Florida (Class B) No. 2654; <http://qfaults.cr.usgs.gov>
- Mehta, Madan; Johnson, James; Rocafort, Jorge: Architectural Acoustics – Principles and Design; Prentice Hall, 1999
- National Environmental Policy Act of 1969 (NEPA)
- National Register of Historic Places (NRHP) [36 *CFR 60.4*]
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by Public Law 106-390, the Disaster Mitigation Act of 2000
- Stewart, Stacy R.; “Tropical Cyclone Report Hurricane Dennis 2-24 September 2004”, National Oceanic & Atmospheric Administration (NOAA), National Weather Service, National Hurricane Center 16 December 2004, Revised: 3 June 2005
- The Council on Environmental Quality (CEQ) regulations implementing NEPA [40 *CFR Parts 1500 through 1508*]
- The State of Florida’s Master Site File (Archeology & Historic Buildings)
- USEPA established air quality standards (<http://www.epa.gov/oarqps/greenbk>)

6.3 Credits for Photographs, Maps and Plans

Environmental Assessment

Cover

All Photos FEMA, Orlando, FL

Appendix A Exhibits

Exhibit 1	Location Maps	Yahoo Maps & Google Earth
Exhibit 2	Detail map of St. George Island State Park	Florida DEP
Exhibit 3	St. George Island S.P. Natural Communities Map	Florida DEP
Exhibit 4	Topographic Map – Goose Island Quad	USGS
Exhibit 5	Topographic Map – Sugar Hill Quad	USGS
Exhibit 6	National Seismic Hazard Map	USGS
Exhibit 7	St. George Island S.P. Soils Map	Florida DEP
Exhibit 8	Water Quality Monitoring – Apalachicola Sound	Florida DOH
Exhibit 9	FIRM Map for East Beach Use Area	FEMA
Exhibit 10	FIRM Map for West Beach Use Area	FEMA
Exhibit 11	FIRM Map explanation of Zones	FEMA
Exhibit 12	USFWS CBRA Zone Map	USF&WS
Exhibit 13	USFWS NWI Wetland Maps	USF&WS

Appendix B Photo Collections

Collections 1-2 Photos of St. George Island State Park FEMA, Orlando, FL
& Florida DEP

Appendix C Preferred Plans

Sheets 01 thru 05 Florida DEP, State Park Service

Section 7 -Secondary and Cumulative Impacts

This section addresses the secondary and cumulative impacts of the proposed action. Secondary effects are those impacts which are “. . . caused by an action and are later in time or further removed in distance but are still reasonably foreseeable” (40 CFR 1508.8), such as a new development attracted to the vicinity of an intersection created by a new highway facility. Cumulative effects are those “. . . impacts which result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions” (40 CFR 1508.7). An example of a cumulative effect would be the degradation of a stream’s water quality by several developments which taken individually would have minimal effects, but as a collective action would cause a measurable negative impact.

As this project consists of the replacement of existing facilities, there are no planned or anticipated actions, consequences or impacts associated with implementation of the proposed action. All activities that would be associated with an implementation are already taking place or have taken place in the immediate locale of West Beach Use Area and East Beach Use Area.

As this project consists of the replacement of existing facilities, and consolidation of public facilities and activities which are currently lacking in the same area, there are no secondary or cumulative impacts anticipated. All activities that would be associated with the *Preferred Alternative* or the Restore to Pre-Disaster Locations with Elevated Facilities are already taking place in the immediate locale.

Section 8 -List of Preparers

This EA was prepared by:

Consoer Townsend Envirodyne Engineers Inc. (CTE)
303 East Wacker Drive, Suite 600
Chicago, IL 60601-5276

Developed with contributions by:

- Brian Smith, Senior Project Manager – QC/QA, Natural Resources – CTE
- Charles (Chick) Savering, Senior Project Manager - FDEP
- Cheryl Nash, Senior Project Scientist – EA Manager, QC/QA – CTE
- Dale Quick, Senior Management Analyst – FDEP
- John Bente, Senior Biologist – District One – FDEP
- Kenneth Hemstreet, Senior Project Engineer – Environmental / Planning – CTE
- Lisa Sagami, Senior Project Engineer – GIS, Graphics, Research – CTE
- William Barbel, Senior Project Scientist – Environmental / Planning – CTE

Questions and comments can be directed to:

Richard Myers, Environmental Officer
FEMA Long Term Recovery Office
100 Sunport Drive
Orlando, FL 32809

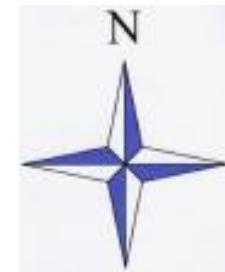
Richard.Myers@dhs.gov
(407) 858-2705

APPENDIX A

List of Exhibits

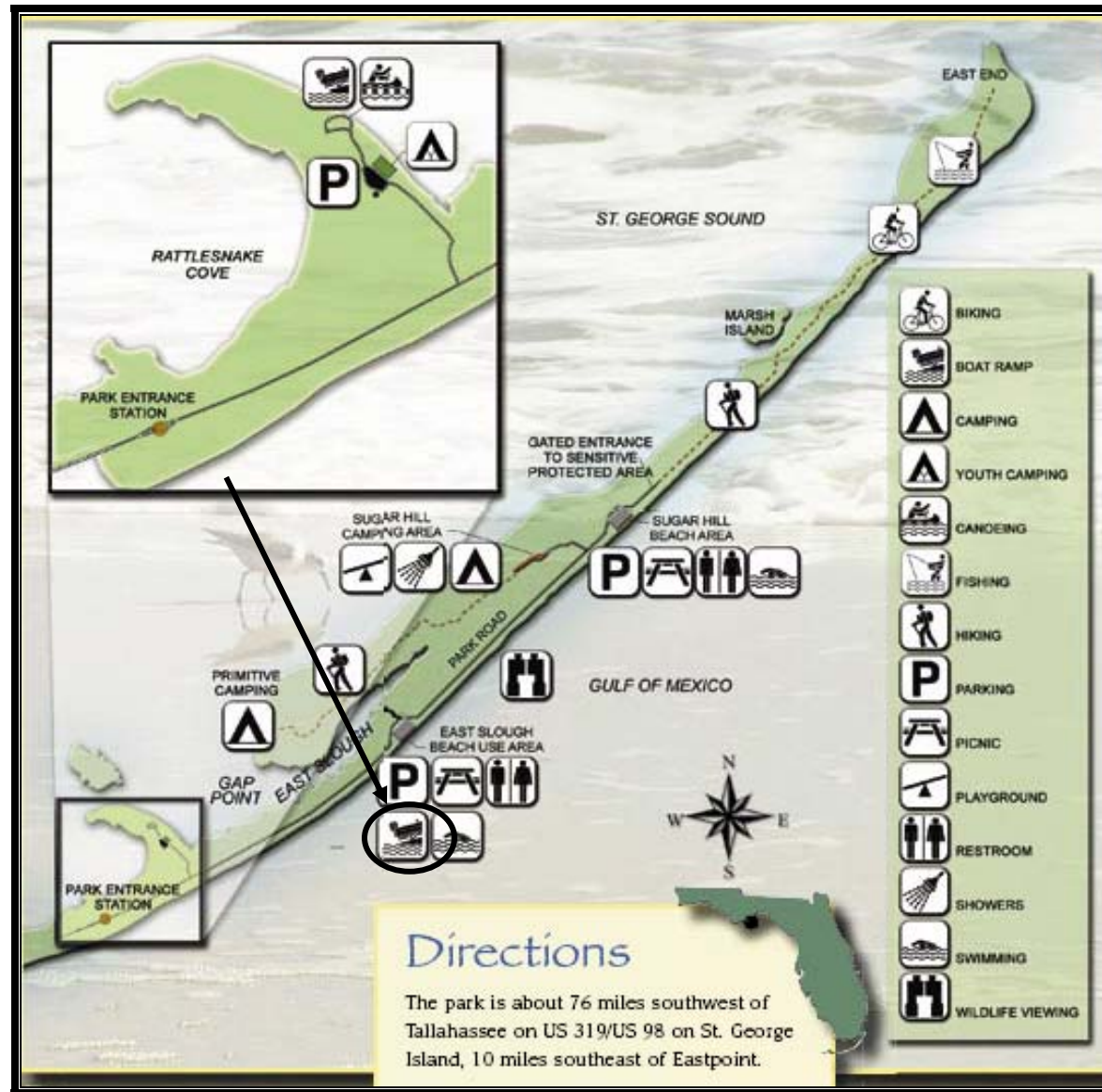
- Exhibit # 1 Location Maps
- Exhibit # 2 Detail Map of St. George Island State Park
- Exhibit # 3 Natural Communities Map
- Exhibit # 4 USGS Topo Map –Goose Island Quad
- Exhibit # 5 USGS Topo Map –Sugar Hill Quad
- Exhibit # 6 Ground Hazard Shaking of Earthquakes Map
- Exhibit # 7 Soils Map
- Exhibit # 8 Water Quality Monitoring – Apalachicola Sound
- Exhibit # 9 Firmette – Map Number 12037C 576E – East Beach Use Area
- Exhibit # 10 Firmette – Map Number 12037C 559E – West Beach Use Area
- Exhibit # 11 Table Explaining Zones on FIRM Maps
- Exhibit # 12 Coastal Zone Management Map
- Exhibit # 13 US FWS National Wetland Inventory Maps

APPENDIX A



Location Maps
Exhibit 1

APPENDIX A



Detailed Park Map

Source: St. George Island State Park Brochure

Exhibit 2

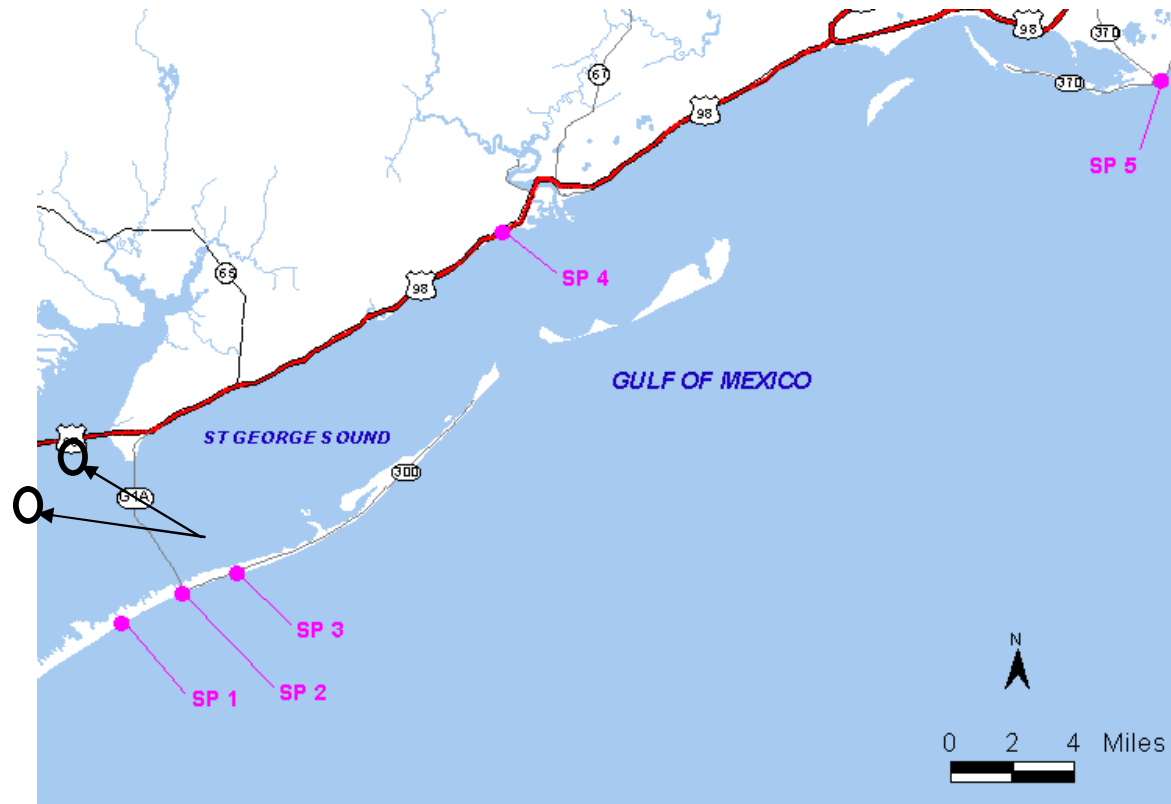
APPENDIX A



...to promote and protect the health and safety of all Floridians.
Florida's health
THE FLORIDA DEPARTMENT OF HEALTH

Franklin County

Sample Locations



APPENDIX A



...to promote and protect the health and safety of all Floridians.
Florida's health
 THE FLORIDA DEPARTMENT OF HEALTH

Beach Water Sampling Results for the Period Starting on 2/20/2006

Sample Point (SP)	Location Click on a Location Name to review sampling history. * Entries indicate resampling events.	Enterococcus	Enterococcus Geometric Mean	Fecal Coliform	Advisory / Warning Issued
1	SAINT GEORGE ISLAND 11TH ST W	Good	Good	Good	No
2	SAINT GEORGE ISLAND FRANKLIN BLVD	Good	Good	Good	No
3	SAINT GEORGE ISLAND 11TH ST E	Good	Good	Good	No
4	CARRABELLE BEACH	Moderate	Poor	Good	Yes
5	ALLIGATOR POINT	Good	Good	Good	No
6	Saint George Island State Park	Good	Good	Good	No

Franklin County
 Saint George Island State Park

Sampling Results History

Sample Period Start	Enterococcus	Enterococcus Geometric Mean	Fecal Coliform	Advisory / Warning Issued
2/20/2006	Good	Good	Good	No
2/13/2006	Good	Good	Good	No
2/6/2006	Good	NA	Good	No
1/31/2006	Good	NA	Good	No
1/24/2006	Good	NA	Good	No
1/17/2006	Good	NA	Good	No

APPENDIX A



...to promote and protect the health and safety of all Floridians.
Florida's health
 THE FLORIDA DEPARTMENT OF HEALTH

Enterococcus Results Description

GOOD	MODERATE	POOR*
0-35 <i>Enterococcus sp</i> per 100 ml of marine water 0-35 CFU/100 mL <i>Enterococcus sp</i> Geometric Mean	36-104 <i>Enterococcus sp</i> per 100 ml of marine water	105 or greater <i>Enterococcus sp</i> per 100 ml of marine water 36 and over CFU/100 mL <i>Enterococcus sp</i> Geometric Mean

Fecal Coliform Results Description

GOOD	MODERATE	POOR*
0-199 fecal coliform organisms per 100 ml of marine water	200-399 fecal coliform organisms per 100 ml of marine water	400 or greater fecal coliform organisms per 100 ml of marine water

*A Poor rating may result in a resampling event to confirm poor conditions, otherwise a Health Advisory or Warning will be issued immediately. These indicate that contact with the water at this site may pose increased risk of infectious disease, particularly for susceptible individuals. A reading of NR means "No Result." This could indicate that no sample was taken at this point because of weather or other factors, or that an analysis result was not obtained from the laboratory.

<http://esetappsdo.h.doh.state.fl.us/irm00beachwater/reshistory.aspx?SPID=381>

APPENDIX A

List of Photo Collections

Collection # 1	Top Left	Aerial view of East Beach Use Area before Dennis
	Bottom Left	View of Beach Use Area from approach roadway
	Bottom Right	View of Units 3, 2 & 1, after Dennis
Collection # 2	Top Left	External view of damaged facility after Dennis
	Top Right	Debris and damaged walkway foundations after Dennis
	Bottom Left	Exposed septic tank after Dennis
	Bottom Right	Damaged restroom facility, after Dennis, and still buried with displaced beach sand

APPENDIX A—PHOTOGRAPHS



The aerial photo to the left captures the West Beach Use Area (or East Slough) after Hurricane Dennis.

The five structures between the parking lot and the shore consist of three picnic pavilions (Structures 1, 3 & 5) while Structures 2 & 4 are each provide restrooms in separate areas for men and for women, with combined outdoor showers.

The photographs were all taken after Hurricane Dennis, and after nearly five feet of windblown beach sand was plowed off of the parking lots.



Approaching one of the areas from the west



West Beach Use Area, structures 3, 2 & 1 looking towards the west

APPENDIX A—PHOTOGRAPHS



Structure # 2 at West Beach Use Area



Debris adjacent to Structure # 2, West Beach Use Area



Typical septic tank exposed after Hurricane Dennis



Structure # 2 at East Beach Use Area

CTE

303 East Wacker Drive, Suite 600, Chicago, IL 60601-5276
T 312.938.0300 F 312.938.1109 www.cte.aecom.com

February 3, 2006

U.S. Fish & Wildlife Service
Gail Carmody, Project Leader
Panama City Field Office
1601 Balboa Avenue
Panama City, FL 32405-3721

Re: Endangered Species Act Consultation
Florida Department of Environmental Services
State Park Service
Franklin County, St. George Island, Florida
FEMA-1595-DR-FL, PW's 702 & 704

Dear Ms. Carmody:

On behalf of the Federal Emergency Management Agency (FEMA), CTE is hereby requesting informal consultation pursuant to the Endangered Species Act and/or the Fish and Wildlife Coordination Act. In July of 2005, Hurricane Dennis made landfall along the Florida Gulf Coast causing damage in a wide geographic area. Destroyed during this storm were the only publicly owned and accessible buildings with restrooms and shower facilities at two locations for the users of St. George Island State Park. The State of Florida Department of Environmental Protection (FDEP) is proposing to replace these structures. FEMA is proposing funding the demolition of the four storm damaged public restroom / bath house structures within St. George Island State Park, Franklin County, Florida, and funding the replacement and permanent relocation of these former four restroom / bath house structures in two locations with a single new structure at each location situated along the median area between the two parking areas. An Environmental Assessment (EA) process is being conducted to document potential influences and impacts from proposed alternative courses of action and determine the ultimate selection of repairs and effects at the two areas.

These two areas for the new single structures are known and identified as the "Sugar Hill" or West Beach Use Area [Lat: 29.70362°, Long: -84.76146°], and the "East Slough" or East Beach Use Area [Lat: 29.7246°, Long: -84.7381°]. The two areas were identified as part of the natural communities inventory as "developed" comprising approximately 63 acres in the Dr. Julian G. Bruce St. George Island State Park Unit Management Plan, February 7, 2003.

FEMA is aware of the presence of sea turtles, Loggerhead sea turtle (*Caretta caretta*) and Green sea turtle (*Chelonia mydas*), along the approximately 8.5 miles of State Park beach during the nesting season, in the project vicinity and has made a determination that the project is "not-likely to adversely affect sea turtles". The proposed replacement and relocation sites for each structure are removed from the areas of historic and known sea turtle visitation. While no grid is set out on the beach as is done on other more turtle-active beaches, the beach is patrolled and surveyed daily during turtle nesting season by Park Service employees and trained volunteers of the Florida Wildlife Commission. If and when new turtle nests are identified and located their positions are GPS'd, signed for no intrusion, metal screen protected, and information sent to district biologists.

There had been patches of sea oats (*Uniola paniculata*) near all of the former structures on the beach, public restrooms and bath houses. All of the patches of sea oats were washed away from all of the beach use area structures. Most of the existing remaining patches of sea oats are still quite a distance from the new structures replacement and permanent relocation construction areas. FEMA has made a determination that the project is "not-likely to adversely affect existing and emergent repopulating stands of sea oats".

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One nest of the piping plover (*Charadrius melodus*) was sighted within the St. George Island State Park in the last 5 years, but no where near (not within a mile) of any of the structures replacement and permanent relocation new construction areas. FEMA has made a determination that the project is “not-likely to adversely affect the piping plover”.

No other T&E species are known to inhabit or visit the structure replacement and permanent relocation site areas. We are hereby requesting information on the potential for the presence of any other Federal-listed threatened or endangered species, or any species of concern, or identified critical habitat to be present at or within the influence of the project area for structure replacement and permanent relocation. We are in the process of coordinating with Florida Fish and Wildlife Conservation Commission in order to receive concurrence with “not-likely to adversely affect” determinations.

Attached are site plans and composite plan with aerial background layouts of the two areas, the West Beach Use Area and the East Beach Use Area, that identify the four storm damaged public restroom/bath house structures, remaining picnic/shelters, the vehicle parking areas, proposed location of the replacement restroom/bath house with the sewer system layout.

In conclusion, FEMA has made a determination that the project is not-likely to adversely affect sea turtles, sea oats, or piping plover. We are hereby requesting information on the potential for the presence of any other Federal-listed threatened or endangered species, or any species of concern, to be present in the project area and a determination of affect.

Please feel free to contact me at either office 312.373.6825 or cell 630.337.7539 telephone or via e-mail at william.barbel@cte.aecom.com if you have any questions.

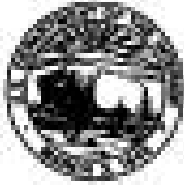
Sincerely:

William Barbel
CTE
Senior Project Scientist
Environmental Specialist for FEMA

Attachments: St George Island State Park Hurricane Dennis Repairs – 9 sheets
Topo Map East Slough – 1 sheet
Topo Map Beacon Hill – 1 sheet

c: Jeanne Millin, Regional Environmental Officer, FEMA

APPENDIX C



IN REPLY, PLEASE USE:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Field Office
1601 Bullock Avenue
Panama City, FL 32406-3721

Tel: (850) 769-0552

Fax: (850) 763-2177

February 28, 2006

Mr. William Barbel
CTE
303 East Wacker Drive, Suite 600
Chicago, Illinois 60601-5276

Re:	FWS Log No. 4-P-06-126
Date Started:	February 3, 2006
Applicant:	FEMA Florida Park Service
Project:	St. George Island State Park Reconstruction Post-Hurricane Dennis
Location:	Gulf of Mexico Beachfront
Ecosystem:	NE Gulf
County:	Franklin County, Florida

Dear Mr. Barbel:

The Fish and Wildlife Service (Service) has reviewed your request dated February 3, 2006, on behalf of the Federal Emergency Management Agency (FEMA) for informal consultation regarding the storm-damaged facilities at St. George Island State Park, Franklin County, Florida and potential impacts to federally protected species. FEMA is proposing to fund the demolition of four storm-damaged restroom facilities and the replacement and permanent relocation of the facilities into two structures to a more landward location. FEMA has determined these projects are not likely to adversely affect (NLAA) nesting female adults and hatchlings of the threatened loggerhead sea turtle (*Caretta caretta*), the endangered green sea turtle (*Chelonia mydas*), the endangered leatherback sea turtle (*Dermochelys coriacea*), and the endangered Kemp's ridley sea turtle (*Lepidochelys kempi*), and the non-breeding piping plover (*Charadrius melodus*) and critical habitat designated for the piping plover.

Your letter provided information concerning the presence of the subject species, and additional information was provided by the Florida Park Service (FPS) and the Florida Fish and Wildlife Conservation Commission (FWC). The Florida Park Service provided conservation measures via e-mail on February 16, 2006. These measures are to minimize the project impacts to the subject species during the project construction. The Florida Park Service has also included provisions for protection of nesting shorebirds. Our response is provided in accordance with

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section 7 of the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 834; 16 U.S.C. 1531 et seq.).

We have summarized the conservation measures to be implemented by the Florida Park Service as indicated in the e-mail. The measures are to be conducted before and during the construction period to minimize impacts to nesting sea turtles, non-breeding piping plover, and nesting shorebirds.

1. Monitoring of shorebird presence and activities were started by Park staff on January 27, 2006, and will continue during the project construction.
2. Daily sea turtle nesting surveys will begin on May 1, 2006, by Park staff and continue until September 1.
3. Tarps or plastic material will be placed over the proposed sites for the two Sewage Disposal Drain Fields and will be accomplished by the Park staff or the Contractor as soon as the State Permit Notice-To-Proceed is issued.
4. "Disturbance-Free Zones" will be posted away from the construction areas where potential bird resting and nesting may occur, and will be conducted by the Park staff prior to commencement of construction.
5. Post and rope will be placed to delineate the beach access areas from each of the beach Pull-Off Parking Areas. This will be done by the General Contractor when these Pull-Off Parking Areas are improved and opened for public use.
6. Additional compatible beach-quality sand will be placed in the areas just seaward of the two beach use area sites to construct a continuous dune system approximately 500 feet in length and overlapping the proposed construction areas. This would form a "dune-like" feature that discourages crawling of sea turtles into the construction areas. This will be performed by the Park staff or by the General Contractor prior to May 1, 2006.
7. The Hurricane Ivan Dune Restoration Planting Project will be conducted during the months of April and May 2006 to enhance the beach dune community, thereby providing a benefit to both shorebirds and nesting sea turtle habitat. This will be done by Landscape Contractors and monitored by Division Staff along with the Environmental Engineering Consultants.

Based on the information provided in your letter and the above commitment from the Florida Park Service, the Service concurs with FEMA's determination of NLAA regarding nesting sea turtles, non-breeding piping plover, and designated critical habitat for the piping plover.

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We appreciate the coordination between FEMA and the Florida Park Service. If you have any questions regarding this consultation, please contact Ms. Lorna Patrick at ext. 229.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jim Mizzi".

Jim Mizzi
Deputy Field Supervisor

cc:

Cheryl Nash, FEMA, Orlando, FL

John Himes and Brad Smith, FWC, Non-game Program, Panama City, FL

Robbin Trindell, FWC, Imperiled Species Mgt., Tallahassee, FL

John Bente, FPS, District 1 Office, PCB, FL

Jim Ross, FPS, Recreation and Planning, Tallahassee, FL

Panama City FOIL Patrick@pki:02-24-06-078-558-0972x129-closed FEMA/FEMA at Georgia Island SP rebuild consultation.doc

CTE

303 East Wacker Drive, Suite 600, Chicago, IL 60601-5276
T 312.938.0300 F 312.938.1109 www.cte.aecom.com

January 27, 2006

Florida Fish and Wildlife Conservation Commission
Farris Bryant Building
Office of the Executive Director
620 South Meridian Street
Tallahassee, FL 32399-1600

Re: Endangered Species Act Consultation
Florida Department of Environmental Services
State Park Service
Franklin County, St. George Island, Florida
FEMA-1595-DR-FL, PW's 702 & 704

Dear Sir/Madam:

On behalf of the Federal Emergency Management Agency (FEMA), CTE is hereby requesting information related to the potential for the presence of state protected species to be located within the vicinity of one of our project areas. In July of 2005, Hurricane Dennis made landfall along the Florida Gulf Coast causing damage in a wide geographic area. Destroyed during this storm were the only publicly owned and accessible buildings with restrooms and shower facilities at two locations for the users of St. George Island State Park. FEMA is proposing funding the demolition of the four storm damaged public restroom / bath house structures within St. George Island State Park, Franklin County, Florida, and funding the replacement and permanent relocation of these former four restroom / bath house structures in two locations with a single new structure at each location situated along the median area between the two parking areas.

These two areas for the new single structures are known and identified as the "Sugar Hill" or West Beach Use Area [Lat: 29.70362°, Long: -84.76146°], and the "East Slough" or East Beach Use Area [Lat: 29.7246°, Long: -84.7381°]. The two areas were identified as part of the natural communities inventory as "developed" comprising approximately 63 acres in the Dr. Julian G. Bruce St. George Island State Park Unit Management Plan, February 7, 2003.

FEMA is aware of the presence of sea turtles, Loggerhead sea turtle (*Caretta caretta*) and Green sea turtle (*Chelonia mydas*), along the approximately 8.5 miles of State Park beach during the nesting season, in the project vicinity and has made a determination that the project is "not-likely to affect sea turtles". The proposed replacement and relocation sites for each structure are removed from the areas of historic and known sea turtle visitation. While no grid is set out on the beach as is done on other more turtle-active beaches, the beach is patrolled and surveyed daily during turtle nesting season by Park Service employees and trained volunteers of the Florida Wildlife Commission. If and when new turtle nests are identified and located their positions are GPS'd, signed for no intrusion, metal screen protected, and information sent to district biologists. We are in the process of coordinating with U.S. Fish and Wildlife Service in order to receive concurrence with a "not-likely to adversely affect sea turtles" determination.

There had been patches of sea oats (*Uniola paniculata*) near all of the former structures on the beach, public restrooms and bath houses. All of the patches of sea oats were washed away from all of the beach use area structures. Most of the existing remaining patches of sea oats are still quite a distance from the new structures replacement and permanent relocation construction areas. FEMA has made a determination that the project is "not-likely to adversely affect existing and emergent repopulating stands of sea oats".

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One nest of the piping plover (*Charadrius melodus*) was sighted within the St. George Island State Park in the last 5 years, but nowhere near (not within a mile) of any of the structure replacement and permanent relocation new construction areas. FEMA has made a determination that the project is “not-likely to adversely affect the piping plover”.

No other T&E species are known to inhabit or visit the structure replacement and permanent relocation site areas. We are hereby requesting information on the potential for the presence of any other state-listed threatened or endangered species, or any species of concern, or identified critical habitat to be present at or within the influence of the project area for structure replacement and permanent relocation.

Attached are site plans and composite plan with aerial background layouts of the two areas, the West Beach Use Area and the East Beach Use Area, that identify the four storm damaged public restroom / bath house structures, remaining picnic/shelters, the vehicle parking areas, proposed location of the replacement restroom/bath house with the sewer system layout.

In conclusion, FEMA has made a determination that the project is not-likely to adversely affect sea turtles, sea oats, or piping plovers. We are hereby requesting information on the potential for the presence of any other state-listed threatened or endangered species, or any species of concern, to be present in the project area and a determination of affect.

Please feel free to contact me at either office 312.373.6825 or cell 630.337.7539 telephone or via e-mail at william.barbel@cte.aecom.com if you have any questions.

Sincerely:

William Barbel
CTE
Senior Project Scientist
Environmental Specialist for FEMA

Attachments: St George Island State Park Hurricane Dennis Repairs – 9 sheets
Topo Map East Slough – 1 sheet
Topo Map Beacon Hill – 1 sheet

c: Jeanne Millin, Regional Environmental Officer, FEMA

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FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION



RODNEY BARRETO
Miami

SANDRA T. KAUPP
Palm Beach

H.A. "HERKY" HUFFMAN
Enterprise

DAVID K. MEEHAN
St. Petersburg

KATHY BARCO
Jacksonville

RICHARD A. CORBETT
Tampa

BRIAN S. YABLONSKI
Tallahassee

KENNETH D. HADDAD, Executive Director
VICTOR J. HELLER, Assistant Executive Director

MARY ANN POOLE, DIRECTOR
OFFICE OF POLICY AND STAKEHOLDER COORDINATION
(850) 488-6661 TDD (850) 488-0542
FAX (850) 922-5679

February 20, 2006

Mr. William Barbel
CTE
303 East Wacker Drive, Suite 600
Chicago, IL 60601-5276

RE: FEMA-1595-DR-FL, PWs 702 & 704, St.
George Island State Park, Franklin County

Dear Mr. Barbel:

Staff in the Florida Fish and Wildlife Conservation Commission (FWC) has reviewed your request for information on state-protected species within St. George Island State Park. As noted in your letter, the sandy beach fronting the Gulf of Mexico and along the inlet are sea turtle nesting beaches used by threatened loggerhead (*Caretta caretta*) and green sea turtles (*Chelonia mydas*). Marine turtle nesting season in the Florida Panhandle is May 1 through October 31. No construction activities, material storage, or operation of heavy equipment should occur on the sandy beach during that time. There should also be no temporary lighting of the construction site that could be seen from the beach.

Other state-listed species known to occur in or near the proposed construction sites in St. George Island State Park include snowy plovers (nesting [Feb. 15 - Aug. 31] and wintering), piping plovers (wintering only; the nest found within the last five years is almost certainly a snowy plover nest), least terns (nesting only [Apr. 1 - Aug. 31]), bald eagles (nesting only [Oct. 1 - May 1]), and American oystercatchers (nesting [Feb. 15 - Aug. 31] and wintering). Direct disturbance from construction workers, vehicles, and equipment; disturbance leading to an increase in predator; and loss of nesting habitat (and the dune vegetation therein) from the construction itself would be the primary effects of this project. Please note that this area is within federally designated piping plover critical habitat (FL-9 unit), and the entire area is within a designated Coastal Barrier Resource (COBRA) unit.

Thank you for the opportunity to comment on this project. If you or your staff would like to coordinate further on this, please contact me at 850-488-6661 or email me at maryann.poole@MyFWC.com, and I will be glad to help make the necessary arrangements. If

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Mr. William Barbel
Page 2
February 20, 2006

your staff has any specific questions regarding this information, please contact Dr. Robbin Trindell at 850-922-4330 or by email at robbin.trindell@MyFWC.com.

Sincerely,



Mary Ann Poole, Director
Office of Policy and Stakeholder Coord.

map/rnt
ENV 1-1
u:\traci.wallace\tracker 06-00643 St George
cc: Lorna Patrick, FWS-PC
John Himes, FWC
Robbin Trindell, FWC
Mark Latch, DEP
John Bente, DEP

APPENDIX C

From: Ross, Jim [Jim.Ross@dep.state.fl.us]
Sent: Thursday, February 16, 2006 7:58 AM
To: Lorna_Patrick@fws.gov; Patricia_Kelly@fws.gov
Cc: Trindell, Robbin; Himes, John; Bente, John; Bowman, Ed; Jones, Daniel R.; Quick, Dale; Saverling, Chick; Jones, Kevin; Hemstreet, Ken; Barbel, William
Subject: Dr. Julian G. Bruce St. George Island State Park - Hurricane Dennis Repairs Project

The main goal of the “repair” project at St. George Island State Park is to re-establish the two main public beach use areas of the park while protecting the natural resource environment. These two use areas along with the access road and associated park utilities were heavily impacted by the storm-surge associated with Hurricane Dennis. During the process of assessing the damage and producing the plans required for these repairs, it was decided to use this opportunity to reduce the man-made impacts at these two use areas. We decided to remove the two damaged beach bathhouses at each use area that were constructed 25 years ago and replace them with a single restroom. These new restrooms will be centrally located within the confines of the parking area median and sited approximately 80’ landward of the old bathhouses. We also decided to replace the previous five elevated walkways with only three in each use area. All these changes will enable us to restore the primary dune system in the location where it needs re-build with the new beach profile.

In order to reduce the potential impact of nesting birds and sea turtles, we, in concert with District I biological staff, concur with the implementation of the following conservation measures before and during the construction period:

*Monitoring of shorebird presence and activities. On-going by Park Staff since January 27, 2006

*Daily monitoring for Sea Turtle nesting sites. Beginning May 1st by Park Staff.

*Placement of tarps or plastic material over the proposed sites for the two Sewage Disposal Drain Fields. This may be done by Park Staff or by the General Contractor if he is issued a construction Notice-To-Proceed.

*Posting of “Disturbance-Free Zones” away from the construction areas where potential bird resting and nesting may occur. This can be done by the Park Staff prior to commencement of construction.

*Placement of Post and Ropes to delineate the beach access areas from each of the beach Pull-Off Parking Areas. This can be done by the General Contractor when these Pull-Off Parking Areas are improved and opened for public use.

*Placement of additional “compatible” beach-quality sand in the areas just seaward of the two beach use areas sites in order to construct a continuous dune system approximately

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500' in length (overlapping the proposed construction areas). This would form a "dune-like" barrier to discourage crawling Sea Turtles from entering the construction areas.

This can be performed by the Park Staff or by the General Contractor prior to the May 1st season.

*The Hurricane Ivan Dune Restoration Planting Project will be conducted during the months of April and May to enhance the beach dune community and thereby providing a benefit to both Shorebirds and Nesting Sea Turtles. This will be done by Landscape Contractors and monitored by Division Staff along with Environmental Engineering Consultants.

Although it is our goal to restore the public access and use of this popular beach use park, we also are guided by the need to protect and enhance the natural resources of the area. We believe that the above outlined measures will enable us to proceed with the proposed park improvements project with no, or very limited detrimental impact on the resource and associated protected species. We continue to work with FEMA on the environmental assessment of the potential impact of the repairs to the park facilities that were in place prior to Hurricane Dennis. We shall also continue to coordinate these protective measures with the USFWS and FWCC through John Bente and the District park biological staff as deemed necessary. Again, our goal is to make these repairs in a timely manner so that these facilities are once again available for public use and enjoyment while providing as much protection as possible to the resource with its associated flora and fauna.

Please advise if this communication should be provided in a formal letter and, if so, what determination should we request.

Jim Ross
Florida Division of Recreation & Parks
Department of Environmental Protection

Phone: (850) 488-5372
SC: 278-5372
Visit The Real Floridasm at <http://www.floridastateparks.org>

APPENDIX C

January 30, 2006

Ms. Susan M. Harp
Planner
Division of Historical Resources
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

**RE: St. George Island State Park
“Hurricane Dennis Repairs for the Park”
DEP Work Project # 6H029**

Dear Ms. Harp:

We are requesting a Cultural Resource Assessment of the proposed construction sites as noted below for the above referenced project. Enclosed you will find a drawing indicating the proposed projects location, vicinity and park site with notations that summarize the project's planned activities.

The project will primarily involve **park drive repair and two restroom buildings replacements with utilities (One at the East Beach Use Area and the other at the West Beach Use Area)**, located within the park boundaries in St George Island, Florida. The proposed project will require construction activities as follows, they are;

1. **Site work/ Earthwork activities (demolition of existing facilities/improvements, clearing, grubbing, trenching and excavations) for drive repairs, restroom buildings construction and utilities improvements (water, sewer, electric & telephone) with associated work related to Hurricane Dennis Repairs for the Park.**
2. **Park drive repairs, approximately 2 miles (* See enclosure).**
3. **Construct Two (2) new Beach Use Restroom Buildings with utilities to replace damaged and demolished facilities (* See enclosure).**

Please provide a letter stating the historical and archeological significance of this project site, if any.

Sincerely,

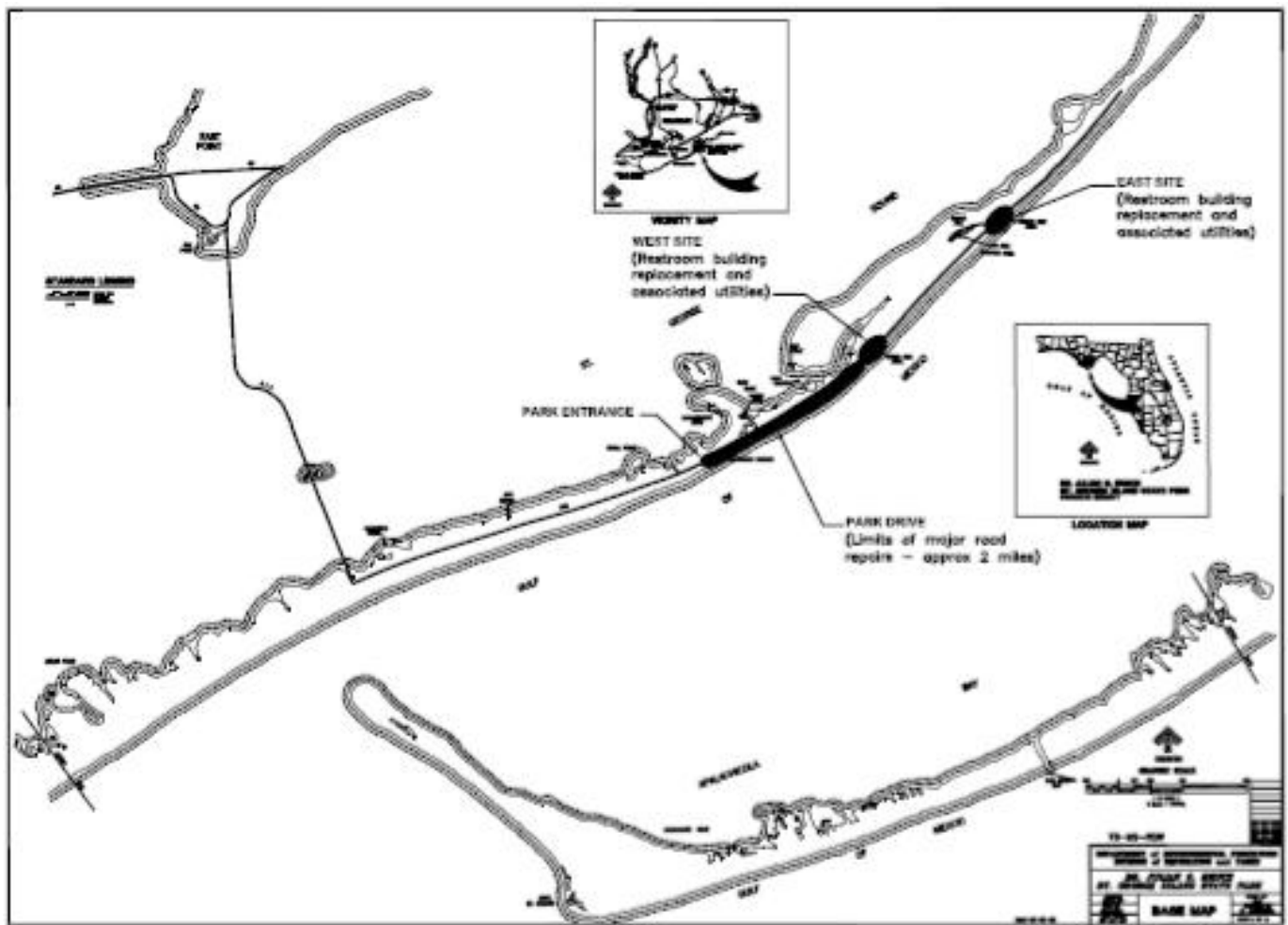
Fredrick Hand, Engineering Specialist IV
Bureau of Design and Construction
Division on Recreation and Parks

FH/

Enclosure

cc: Mr. Kevin Jones
Mr. Eric Kiefer
Mr. Ben Withers
Mr. Jim Ross
Mr. Richard Reinert
Mr. Chick Saverling

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FLORIDA DEPARTMENT OF STATE

Sue M. Cobb

Secretary of State

DIVISION OF HISTORICAL RESOURCES

Mr. Fred Hand
Bureau of Design and Recreation Services
Division of Recreation and Parks
Department of Environmental Protection
3540 Thomasville Road
Tallahassee, Florida 32309

February 2, 2006

Re: St. George Island State Park
Hurricane Dennis Repairs: Park Drive & Two Restroom Replacements
Franklin County
DHR Project File No. 2006-599

Dear Mr. Hand:

In accordance with this agency's responsibilities under Section 267.061, *Florida Statutes*, we reviewed the referenced project.

The proposed project activities will be undertaken as a result of Hurricane Dennis damage, and we note that the park drive was relocated at least one other time because of storm damage. A review of the Florida Master Site File indicates that there are three recorded archaeological sites along Rattlesnake Cove, but none within the project area.

Because of the project locations and/or nature, it is considered unlikely that historic properties will be affected. Therefore, it is the opinion of this office that the proposed project activities will have no effect on historic properties listed, or eligible for listing in the *National Register of Historic Places*, or otherwise of historical or archaeological value.

If you have any questions concerning our comments, please do not hesitate to contact Susan Harp at (850) 245-6333. Thank you for your interest in protecting Florida's historic resources.

Sincerely,

Frederick P. Gaske, Director

Xc: Mr. Steve Martin, DEP
Mr. Kevin Jones, Park Manager
500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6436

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6452

☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

☐ Historical Museums
(850) 245-6400 • FAX: 245-6433

☐ Southeast Regional Office
(904) 467-1000 • FAX: 467-1001

☐ Northeast Regional Office
(904) 875-5045 • FAX: 875-5044

☐ Central Florida Regional Office
(813) 777-3843 • FAX: 777-7340

APPENDIX C

E-Mail message from William Henry (FEMA) to Laura Kammerer (SHPO) dated March 07, 2006 Regarding Sea Turtle Protection

From: Henry, William [mailto:William.Henry@dhs.gov]
Sent: Tuesday, March 07, 2006 11:19 AM
To: Kammerer, Laura
Subject: St George Island Turtle Protection

Turtle Protection Mitigation for the St. George Island Project

In addition to conducting historical and archaeological reviews for federal undertakings FEMA's environmental section is also required to review projects encompassing other federal statutes, including the National Environmental Protection Act and the Endangered Species Act. Pursuant to the Endangered Species Act, FEMA has consulted with the U.S. Fish and Wildlife Service (USFWS) regarding this project. USFWS is requiring that the project incorporate mitigation into the scope of work for the protection of sea turtles.

The St. George Island State Park is routinely visited and utilized for nesting by several species of sea turtles. Listed on the endangered species list, green sea turtles (*Chelonia mydas mydas*) and leatherback turtles (*Dermochelys coriacea*); and listed as threatened, loggerhead turtles (*Caretta caretta*), are those most often encountered. The loggerheads and greens are known to utilize the beach, and many nests have occurred here over the years. Sea turtles crawl onto the beach May 1st through October 31st to lay their eggs in the sand.

In a letter dated February 28, 2006, USFWS determined that protective measures need to be incorporated into the work plan to prevent the incidental taking of sea turtles. The applicant, the Florida Department of Environmental Protection is proposing to construct a temporary continuous artificial dune-like system approximately 500 feet in length to discourage sea turtles from crawling and laying their eggs in the construction zone. This will require the introduction of imported compatible beach-quality sand to the area just seaward of the proposed construction area. Work will be undertaken by park staff or by general contractor under supervision of park staff. I have reviewed this project and no ground disturbing activities are associated with the project and the work is considered a reversible action.

This project is a time sensitive project and the dunes need to be in place prior to the turtle nesting season which begins in late April / early May and extends through the of October. This is essential to provide protection to the turtles.

FEMA would like to request an expedited review for this project. A response by email would be greatly appreciated.

If you have any questions or need further clarification regarding this project, please contact Bill Henry, Historic Specialist at the Florida Long Term Recovery Office 703.399.0602 or email him at William.Henry@dhs.gov, or contact Joseph Hudick, Environmental Liaison Officer at 703.463.1468 or by email at Joseph.Hudick@dhs.gov.

Thanks

Bill

William Henry

F E M A Historic Preservation Specialist

Office: 407.858.2788

Cell: 703.399.0602

Fax: 407.251.9930

Department of Homeland Security

FEMA Long Term Recovery Office

100 Sunport Lane - Orlando, FL 32809

APPENDIX C

E-Mail message from Susan Harp (SHPO) to William Henry (FEMA) regarding the e-mail dated March 07, 2006 regarding Sea Turtle Protection

From: Harp, Susan [\[mailto:SHarp@dos.state.fl.us\]](mailto:SHarp@dos.state.fl.us)
Sent: Tuesday, March 07, 2006 11:51
To: Henry, William
Subject: FW: St George Island Turtle Protection

This project will have no effect on historic resources.

Susan M. Harp

Historic Preservation Planner

Division of Historical Resources

R. A. Gray Building

500 S. Bronough Street

Tallahassee, FL 32399-0250

(850) 245-6333

APPENDIX D

PUBLIC NOTICE

To the Residents of Franklin County, Florida and Interested Citizens:

On behalf of the Federal Emergency Management Agency (FEMA), Consoer Townsend Envirodyne Engineers Inc. is conducting an Environmental Assessment (EA) for the replacement of four restrooms at the St. George Island State Park in Franklin County.

Two restrooms/bath houses at the East Slough Beach Use Area and two at the Sugar Hill Beach Area were extensively damaged and subsequently demolished, including the septic systems. The Florida Department of Environmental Protection is proposing to re-build one 1,225-square foot combined restroom/bath house, with accompanying septic systems, at each of the Beach Use Areas. The restrooms/bath houses would be relocated approximately 80 feet landward of the previous facilities, between existing parking lots in an area that has been pre-disturbed. The structures will be elevated 15 feet above sea level on concrete pilings. Access ramps and an American with Disabilities Act compliant lift station will provide public access to the facilities. A new aerobic treatment disposal system will be installed at each facility. The disposal system will be composed of two aerobic treatment tanks and two 3,000-gallon dosing tanks. Treated waste from the dosing tanks will be transferred via 3-inch mains to drain fields located behind the parking lots at each Beach Use Area. Both locations where this will occur are adjacent to the Gulf of Mexico beach in an area composed primarily of beach sands.

The EA is currently in draft form and is available for your review. The Draft EA addresses a number of topics including the feasible alternatives under consideration, environmental impacts of the alternatives, and mitigation measures for any substantial impacts identified. The Draft EA indicates that there are no significant adverse impacts from the Preferred Alternative. The public is being invited to comment on the project. If no substantive comments are received following agency and public review, the draft EA will be considered the final EA and no additional information will be incorporated.

It is important that we receive your input on the Draft EA to assure that we have addressed the specific issues and concerns that the residents of Franklin County and the State of Florida believe are important. Information repositories have been set up at the following locations for you to come in and review the Draft EA:

Franklin County Library
Apalachicola Program Center
148 8th St.
Apalachicola, FL 32329

Franklin County Library
Eastpoint Branch
29 Island Drive
Eastpoint, FL 32328

Apalachicola Municipal Library
72 6th Street
Apalachicola, FL 32320

St. George Island State Park
Park Headquarters
1900 E. Gulf Beach Dr
St. George Island, FL 32328

APPENDIX D

In addition <http://www.fema.gov/plan/ehp/envdocuments/index.shtm> is the internet location where the document may be viewed online.

You can provide us with comments on the EA by mailing faxing, or emailing your comments to the following address:

CTE Engineers Inc.
303 East Wacker Drive
Suite 600
Chicago, Illinois 60601
PHONE: 312/373-6808
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Attention: Cheryl M. Nash, Senior Environmental Scientist
email: cheryl.nash@cte.aecom.com

We will need to receive your comments by July 15, 2006. We look forward to your input.